



Healthier Together EU Non-Communicable Diseases Initiative



June 2022

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Healthier Together

EU Non-Communicable Diseases Initiative

EUROPEAN COMMISSION

DG SANTE

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A toolkit to boost health and wellbeing

The European Commission has launched the **Healthier together – EU Non-Communicable Diseases Initiative** (EU NCD Initiative) to support EU countries in identifying and implementing effective policies and actions to reduce the burden of major non-communicable diseases (NCDs) and improve citizens' health and well-being.

The Initiative covers the period **2022-2027** and includes five strands: 1. a horizontal strand on shared **health determinants**, focusing on population-level health promotion and disease prevention of NCDs (complementing the actions of Europe's Beating Cancer Plan); 2. **diabetes**; 3. **cardiovascular diseases**; 4. **chronic respiratory diseases**; and 5. **mental health and neurological disorders**. These areas were prioritised because of their significant health burden. Actions on cancer, which is also a major NCD, are covered in Europe's Beating Cancer Plan. While the strands enable addressing particular challenges of each disease group, the initiative as such promotes a **holistic and coordinated approach to prevention and care**.

The first step of this Initiative was the co-creation of the current document together with EU countries' competent authorities, with input from relevant stakeholders, from January to May 2022.

This document helps to **orientate policies and set up a basis for implementation** of actions over the next years. The document is therefore a **toolkit to guide and coordinate action on NCDs**, and to identify and create the **windows of opportunity for high-impact actions to be implemented** across countries. Such actions may include the uptake of nationwide or EU-level policies and transfer of good practices, the development and implementation of guidelines and recommendations, the piloting and rolling out of innovative approaches, or the launch of projects expected to have a significant impact. It should be noted that recommendations provided by this document do not constitute a prejudice to the positions of EU countries in other settings on specific measures listed among the actions, in particular in future discussions within the European Council.

This document consists of two parts. Part A describes the **co-creation process** used to develop the EU NCD Initiative. This innovative process consisted of regular meetings with and written inputs from the competent authorities of the EU countries and health stakeholders, to shape the initiative based on their needs and opportunities for collaboration. Alignment was also sought with the European Investment Bank (EIB), the World Health Organization (WHO), the European Observatory on Health Systems and Policies, and the Organisation for Economic Co-operation and Development (OECD).

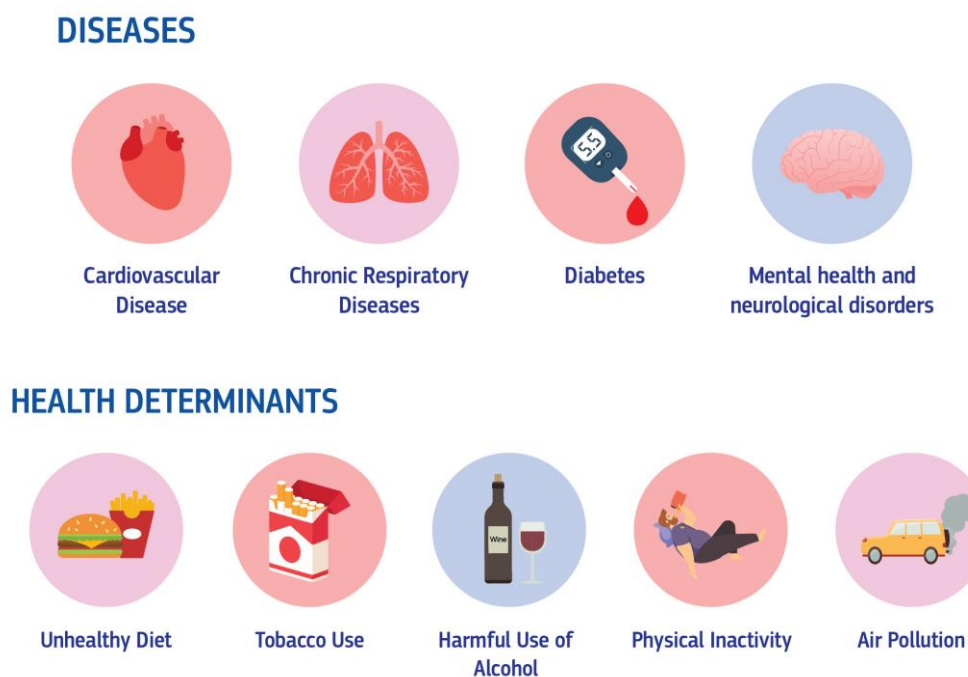
Part B describes the EU NCD Initiative **resulting from the collection of suggestions and comments**. It starts with a brief description of the challenge that NCDs pose on EU countries and explains the added value of working together at EU level in this area. It then provides an overview of suggested **effective and ambitious policies, good practices and other actions** for each strand. This list has been used as a tool for the collaborative process, and to help countries prioritise policies, good practices and other actions that may have a significant impact on the burden of NCDs in Europe. The list includes suggested **collaborative actions between EU countries as well as between countries' competent authorities and stakeholders**.

Part B also includes an **overview of EU financial and legal tools**, to help countries' authorities and stakeholders make use of the full potential of EU instruments for reducing the human and financial cost of NCDs. In this way, the document not only suggests ideas and opportunities, but also identifies and creates opportunities for supporting the implementation of high-impact actions.

Part A – The Healthier Together Initiative in a nutshell

In December 2021, the European Commission launched the Healthier together – EU Non-Communicable Diseases Initiative (EU NCD Initiative), to support EU countries in reducing the human and financial burden of non-communicable diseases (NCDs). The Initiative hence helps countries to achieve the United Nations Sustainable Development Goal Target 3.4, i.e., to **reduce premature mortality from NCDs by one third by 2030 and promote mental health and well-being**¹. Complementing Europe's Beating Cancer Plan, the EU NCD Initiative is a pillar of an enforced European Health Union.

The EU approach to the challenge of NCDs involves an integrated response across all sectors and policy fields. It does so by reinforcing and supporting **policy implementation and effective action of EU countries' health authorities and stakeholders** in five strands².



While the five strands address particular challenges of each disease group, the Initiative as such promotes a **holistic and coordinated approach to prevention and care**. The focus of the EU NCD Initiative is on **health promotion and disease prevention**, this arguably being one of the most underinvested areas. Nevertheless, and reflecting on the experience with Europe's Beating Cancer Plan, the European Commission welcomes countries' competent authorities to identify and prioritise actions within a broader spectrum. As such, the initiative can support:

- improving knowledge and sharing of best practices,
- health promotion and disease prevention, including screening and early detection,
- optimising tools for diagnostics, treatment and disease management,

¹ Targets 3.a, strengthening the implementation of the WHO Framework Convention on Tobacco Control, 3.5, strengthening the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol, and Goal 2 on nutrition are also relevant.

² Part B and Annex 3 provide more information about the rationale for selecting the five strands. The NCD Initiative addresses the the major NCDs from the point of view of premature mortality.

- improving the quality of life of people living with NCDs and their families.

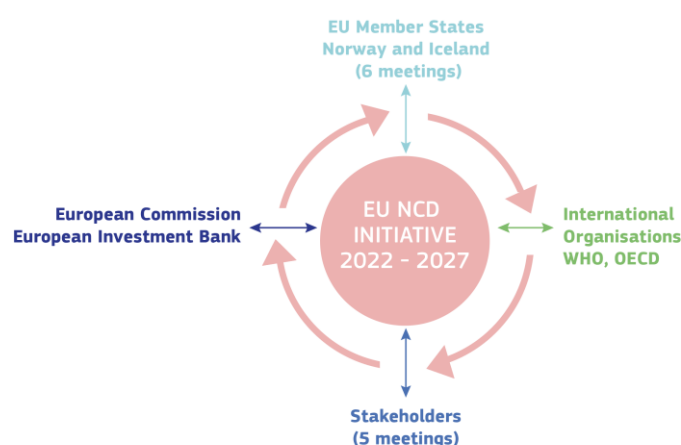
Concrete actions may consist of **implementing comprehensive public health policies, transferring good practices, developing guidelines, rolling out innovative approaches or launching projects expected to have significant public health impact.**

EU countries ownership

In an innovative way, the EU NCD Initiative has been **co-created with the EU countries' competent authorities with input from relevant stakeholders**. This participatory process emphasises countries' **engagement, support, commitment and ownership** to reinforce ambitious policy action and implementation on the ground. The drafting process lasted from January to May 2022, with the support of a scientific secretariat.

The EU NCD Initiative was launched in a meeting with the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases (SGPP) on 15 December 2021. Representatives of 21 EU countries plus Norway attended the meeting, together with several Commission services, EU agencies, the EIB and the OECD. The SGPP strongly supported the Initiative and agreed to set up a sub-group to support its development. The SGPP sub-group on NCDs had its first meeting on 28 January 2022, chaired by DG SANTE.

The valuable engagement from health stakeholders



While the policy lead of the EU NCD Initiative lies with the European Commission and the EU countries' competent authorities, it was essential to engage civil society in the process to benefit from inputs from key stakeholder groups. The knowledge and experience of networks of patients, health professionals, civil society organisations, and academia are important, as their contributions can help accelerate the implementation of innovations in the area of health promotion and NCD prevention, both at national and regional/local level. Also, inputs from international organisations, such as the OECD and the WHO, must be harnessed; therefore, opportunities were created for their meaningful participation and dedicated support.

Stakeholders from countries participating in the EU4Health Programme were invited to register with a specific stakeholders' network on the Health Policy Platform, which serves as a central channel for stakeholder communication and engagement. They have been invited to provide input

at multiple occasions during the process, to identify good practices, and to suggest and support ambitious actions that EU countries may prioritise. They have also been invited to identify actions that stakeholders could lead themselves, and to support EU countries in achieving the objectives of the Initiative. To collect their inputs, templates were provided through the Health Policy Platform.

A first webinar with the NCD stakeholder community, chaired by DG SANTE, was held on 15 December 2021, in which around 120 representatives participated. They warmly welcomed and strongly supported the Initiative. During the subsequent stakeholder webinars (see calendar in Annex 1), stakeholders expressed their support for the identified areas for action and suggested good practices and priorities for collaborative actions.

An innovative co-creation process

The process steps to develop the EU NCD Initiative are summarised below. The results of steps 1 and 2 have been integrated in Part B of this document. Steps 3 and 4 are expected to follow, starting already in 2022, namely including implementation actions in the EU4Health Work Programme, and continuing beyond.

1. Inventory of evidence-based and/or promising policies, good practices and other actions, and mapping of financial and legal support instruments

To inspire countries to launch ambitious policies, good practices and other actions, potentially with EU support, the document includes a list of potential areas of work. This list includes proven effective or promising high-impact, equity-enhancing policies, good practices and other actions, gathered from the work of previous EU-funded Joint Actions, the EU Public Health Best Practice Portal³, international reference institutes (e.g., OECD, WHO), research projects, systematic reviews of relevant prevention or NCD management interventions. In addition, **EU countries' authorities and stakeholder organisations provided** comments and suggested evidence-based or promising ambitious actions, ranging from, e.g., legislative changes to behavioural interventions targeting specific population or patient groups.

2. Collecting priorities

The approach of this Initiative is **voluntary and flexible**, considering that EU countries may differ in the challenges they face concerning the incidence and prevalence of specific NCDs, in their approaches to prevent or tackle them, and in the organisation of the health system. EU countries' competent authorities were therefore asked to indicate in which areas and actions they were most interested. Stakeholders then provided suggestions for consideration. Besides expressing their priorities, countries were also invited to share successful actions they already implemented. These experiences have been essential for providing helpful guidance and identifying good practices for other countries to consider and to benefit from.

See Annex 1 for an overview of the consultation meetings that took place, including the number of participating countries or stakeholders per meeting. Annex 1 also includes a figure that depicts the process of the input collection, as EU countries and stakeholders were not only enabled to provide input during the consultation meetings, but were also given the opportunity to provide input in writing.

EU countries contributed to various draft versions of this document, by providing suggestions in the text or in comments on the side. In total 20 EU countries and Iceland provided input in writing,

³ <https://webgate.ec.europa.eu/dyna/bp-portal/>

of which some only provided input regarding their priority areas and others provided more extensive input on the content of the strands.

Stakeholders that were a member of the thematic Healthier Together NCD Initiative network of the Health Policy Platform, were also given the opportunity to provide their input for priority areas in writing. Around 60 stakeholder organisations provided their input by email, see Table 2 in Annex 1 for the complete list of stakeholders that provided their input. All the input received was carefully reviewed and taken into consideration (see also Annex 2 for a more detailed description of the inputs provided).

3. Clustering countries for teamwork

Countries' ranking of priority areas and actions will enable **grouping countries** according to their interests, to identify **opportunities for teamwork** and to suggest specific exchanges of experience, mentoring or peer support between countries. This may be based on the similarity of challenges and/or the teaming of countries that have successfully tackled a specific problem with countries that are at the start of doing so. **Opportunities for combining the efforts of public authorities and stakeholders** to achieve objectives or develop joint projects have been also identified.

4. Implementation (with support of EU-level instruments)

The process should **ultimately result in the implementation of actions on the ground** and selecting actions that could **benefit from EU funding** to achieve faster or wider deployment. To facilitate this process, an overview of available financial and legal support instruments for the years 2022-2027 is provided in this document (see Annex 6). It may support the overall efforts to help national authorities explore synergies and complementarities within the EU budget (this will also be helped by the network of national focal points of the EU4Health Programme).

Commission services have participated – and are still participating – in the discussions of the EU NCD Initiative, and may in this way be better informed of countries' and stakeholders' needs and priorities, when conducting their programming. This may open additional doors for EU support to priorities identified.

Importantly, the process of co-creating the initiative has promoted the **optimal use of the available financial and legal supportive tools**. In particular, the initiative makes use of funding under the 2022 EU4Health Work Programme⁴, including two EU Joint Actions: one on health determinants, which will be coordinated with Europe's Beating Cancer Plan, and a second joint action addressing diabetes and cardiovascular diseases. Calls for proposals for stakeholders are also included in the 2022 EU4Health Programme, for diabetes, cardiovascular diseases, mental health and other NCDs. Subsequently, the Initiative will continue to help identify, create and use windows of opportunity for high-impact actions in all five strands to be implemented with EU support, from the EU4Health Programme and other EU programmes and funding instruments. Table 1 provides an overview of some of the ongoing actions that already contribute to implement the EU NCD Initiative.

⁴ 2022 EU4Health Work Programme (europa.eu)

Table 1. . Examples of ongoing actions that contribute to implement the EU NCD Initiative'

Action	Programme	EU contribution (EUR)	More information
YOUNG50 #Stay Healthy - Cardiovascular Risk Prevention - Project	3rd HP, AWP 2018	983 255	https://webgate.ec.europa.eu/chafea_pdb/health/projects/847130/summary
EUPAP – An European Physical Activity on Prescription model-project	3rd HP, AWP 2018	1 346 154	https://www.eupap.org/ https://webgate.ec.europa.eu/chafea_pdb/health/projects/847174/summary
Adapting and Implementing EAAD's Best Practice Model to Improve Depression Care and Prevent Suicidal Behavior in Europe (EAAD-Best Project)	3rd HP, AWP 2020	1 582 481	https://webgate.ec.europa.eu/chafea_pdb/health/projects/101018325/summary https://eaad-best.eu/about-eaad-best/
Joint Action on the Implementation of Best Practices in the area of Mental Health (ImpleMENTAL)	3rd HP, AWP 2020	5 398 424	https://ja-implementation.eu/
The National Focal Points (NFP) - the national experts appointed by EU countries to assist the European Commission in the promotion of the EU4Health programme	3 HP, AWP 2020	2 499 882	https://hadea.ec.europa.eu/programmes/eu4health/national-focal-points_en
Joint Action implementation of best practices and research results on prevention of non-communicable diseases and risk factors – Diabetes: Reverse Diabetes2 Now	EU4Health, AWP 2021	4 000 000	https://ec.europa.eu/health/publications/2021-eu4health-work-programme_en https://ec.europa.eu/health/system/files/2021-10/ev_20211019_pres01_en_0.pdf
Joint Action implementation of best practices on prevention of non-communicable diseases and risk factors - Healthy lifestyle: Smart Family and Grunau moves focusing on children in deprived districts	EU4Health, AWP 2021	3 000 000	https://ec.europa.eu/health/publications/2021-eu4health-work-programme_en https://ec.europa.eu/health/system/files/2021-10/ev_20211019_pres01_en_0.pdf
Action grants to support implementation of best practices on the ground with direct impact on the effort to tackle mental health challenges during COVID-19	EU4Health, AWP 2021	750 000	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/eu4h-2021-pj-07
Disease knowledge gate – Networking and accessing	EU4Health, AWP 2021	3 000 000	

comparable data for policy, monitoring and research			
Contribution to CR-g-22-08.02 Call for proposals on cancer and other NCDs prevention – action on health determinants	EU4Health, AWP 2022	11 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en This action is in cooperation with Europe's Beating Cancer Plan.
CR-g-22-08.01 Joint action on health determinants	EU4Health, AWP 2022	75 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en This action is in cooperation with Europe's Beating Cancer Plan.
DP-g-22-06.03 Joint action on diabetes and cardiovascular disease	EU4Health, AWP 2022	53 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en
DP-g-22-06.04 Call for proposals on prevention of NCDs – cardiovascular diseases, diabetes	EU4Health, AWP 2022	5 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en
DP-g-22-06.05 Call for proposals on prevention of NCDs - other NCDs	EU4Health, AWP 2022	5 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en
DP-g-22-07.01 Call for proposals on promoting mental health - best practice Icehearts	EU4Health, AWP 2022 Flagship initiative of European Year of Youth	4 000 000	
DP-g-22-07.03 Call for proposals on promoting mental health - best practice Let's talk about children	EU4Health, AWP 2022 Flagship initiative of European Year of Youth	4 000 000	
DP-g-22-07.04 Call for proposals on promoting mental health migrants and refugees - promising best practice with special focus on Ukrainians refugees	EU4Health, AWP 2022	2 000 000	
Direct grant with International Organisations (WHO) DP-g-22-07.02. Addressing mental challenges	EU4Health, AWP 2022	1 000 000	https://ec.europa.eu/health/publications/2022-eu4health-work-programme_en
Contribution agreement with the International Federation of Red Cross Societies to build	EU4Health, AWP 2022	7 000 000	

capacity and capabilities, and provide mental health and psychosocial support to displaced people fleeing from Ukraine			
Total funding		189 560 196	
<i>Note: AWP stands for “Annual work programme”, 3rd HP stands for “3rd Health Programme” and EU4Health stands for “the EU4Health programme”</i>			

Part B – The Healthier Together – EU NCD Initiative

This part describes the EU NCD Initiative in more detail.

Chapter 1 explains why and how EU countries should provide a strong response to the increasing burden of NCDs, including the EU added value of working together in this area. More information on the burden of NCDs and their risk factors is included in **Annex 3: Non-communicable diseases burden and risk factors**.

Chapter 2 provides an overview of areas for action in each of the five strands, including examples of policies, good practices and other interventions to consider for implementation. More information is provided in **Annex 4: Priority areas**.

An extensive list of possible interventions, distinguishing large-scale policy options and targeted interventions or best practices, is included in **Annex 5: Options for policies and actions by strand and priority area**.

Chapter 3 provides a description of relevant EU instruments, including both legal and financial tools, to help countries make use of the full potential of EU support. A more detailed overview is provided in **Annex 6: Overview of EU initiatives to support improvement in health and healthcare**.

1. Why this initiative?

There is a strong rationale for increasing the efforts to address NCDs at this moment, which lies in the increasing burden of NCDs and the necessity to put more – and also more ambitious – efforts in priority areas to reduce this burden. Annex 3 provides an overview of the challenge of NCDs for Europe; this first chapter explains the urgency as well as the opportunities for countries to act strongly upon NCDs, including the added value of concerted efforts at EU level.

Currently, about two thirds of all deaths in the European region result from diabetes, cardiovascular diseases, chronic respiratory diseases, and mental disorders. Large inequalities in life expectancy exist between socioeconomic groups within EU countries. Significant inequalities also exist between EU countries, which relates to the much higher mortality rates of certain NCDs, in particular cardiovascular diseases, in some countries than in others. NCDs do not only affect life expectancy, they are also responsible for 77% of the disease burden in the European region. They cause substantial human suffering and threaten the financial position of households, which reduces participation opportunities for all household members, including children. Moreover, the societal costs of NCDs are huge and expected to grow further, considering also the EU's ageing population. NCDs account for the largest part of countries' healthcare expenditures, costing EU economies EUR 115 billion, or 0.8% of GDP, annually⁵. NCDs also entail other societal costs, such as loss of productivity, loss of workforce, loss of informal care, costs of social insurance and social care.

Effective health promotion and preventive strategies that address individual behaviours and facilitate healthy choices are needed to substantially reduce the prevalence and mortality of NCDs. Considering that improved health promotion and disease prevention can reduce the prevalence of NCDs by as much as 70%⁶, implementing such integrated strategies on a large scale within the

⁵ OECD/EU (2016), Health at a Glance: Europe 2016 – State of Health in the EU Cycle, OECD Publishing, Paris.
<http://dx.doi.org/10.1787/9789264265592-en>

⁶ [https://ec.europa.eu/health/non-communicable-diseases/overview_en#:~:text=Non%2Dcommunicable%20diseases%20\(NCDs\),causes%20of%20avoidable%20premature%20deaths.](https://ec.europa.eu/health/non-communicable-diseases/overview_en#:~:text=Non%2Dcommunicable%20diseases%20(NCDs),causes%20of%20avoidable%20premature%20deaths.)

EU can be cost-effective and generate substantial health and wellbeing gains. Particular attention must be paid to social determinants, as these are responsible for large inequalities in the prevalence and mortality of NCDs.

While there is substantive knowledge of the major determinants underlying NCDs' occurrence and progression, policy interventions that can have a significant impact^{7,8} have not been implemented to their full potential within the EU⁹. In 2018, no more than 2.8% of total health expenditure in the EU was spent on prevention¹⁰, whereas the costs of treating NCDs are high. In addition, despite the high expenditure for NCD management, many patients experience the quality of care as suboptimal; they experience a lack of care coordination and integration, little involvement in decision-making and co-creation, and have unmet needs¹¹. These deficiencies are even more strongly felt by people with multimorbidity¹².

Considering the high challenge of NCDs for individuals, households, health systems and societies, already now and in the future, authorities have a responsibility as well as opportunities to increase efforts to proactively combat NCDs and achieve the United Nations SDG Target 3.4 to reduce premature mortality from NCDs by one third by 2030, through prevention and treatment, and to promote mental health and wellbeing.

The European Commission and EU countries' health authorities have collaborated on NCDs already for many years^{13,14}, but reducing the burden of NCDs has become even more urgent as a result of the COVID-19 pandemic. The almost exclusive focus of countries' health systems on COVID-19 since 2020 has had major consequences, with many instances of diagnosis and treatment of NCDs being forcibly postponed. In addition, people living with NCDs who become infected with the coronavirus SARS-CoV-2 are at increased risk of developing more severe illness as a consequence of that infection. In parallel, the related burden of mental illness has increased, reflected in a significant rise of reported anxiety and depressive disorders in most European countries¹⁵. Furthermore, rises in unhealthy behaviours, such as malnutrition and physical inactivity, have been observed. As a consequence, a health situation that was already serious has become even more

⁷ <https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y>

⁸ <https://www.paho.org/en/documents/safer-technical-package-five-areas-intervention-national-and-subnational-levels>

⁹ For example, the insufficient implementation of the WHO Framework Convention on Tobacco Control <https://www.euro.who.int/en/health-topics/disease-prevention/tobacco/publications/2020/factsheets-on-who-foctc-implementation-through-mpower-in-the-who-european-region-2020>

¹⁰ 3% of healthcare expenditure spent on preventive care - Products Eurostat News - Eurostat (europa.eu)

¹¹ Fradgley EA, Paul CL, Bryant J. A systematic review of barriers to optimal outpatient specialist services for individuals with prevalent chronic diseases: what are the unique and common barriers experienced by patients in high income countries? *Int J Equity Health* 2015; 14: 52. doi:10.1186/s12939-015-0179-6

¹² van der Aa MJ, van den Broeke JR, Stronks K, et al. Patients with multimorbidity and their experiences with the healthcare process: a scoping review. *J Comorb* 2017; 7(1): 11-21. doi:10.15256/joc.2017.7.97

¹³ The European Commission and EU countries have worked together on NCDs for many years, and a reflection process to optimise the response to NCDs and the cooperation between EU countries took place already in 2011. This was supported via initiatives such as, the Joint Action on chronic diseases (JA CHRODIS), the Joint Action Reducing Alcohol Related Harm (JA RARHA), the Joint Action on frailty (ADVANTAGE JA), the Joint Action for Mental health and Well-being, and the Joint Action(s) on Dementia. Late 2016, the European Commission set up a successful approach to transfer and replicate best practices on health promotion and disease prevention, with the Steering Group on Health Promotion, Disease Prevention and Management of NCDs (SGPP) being key to prioritise areas of work and to identify and transfer activities on the ground. Best practice transfer was then supported via additional Joint Actions on chronic diseases (CHRODIS+), nutrition (Best-ReMap) and mental health (ImpleMENTAL), and also through projects such as Young 50 and EUPAP (both aiming to reduce risks of NCDs), WhoEUGrain (nutrition), and EAAD-Best (suicide prevention).

¹⁴ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-results;programCode=3HP>

¹⁵ https://ec.europa.eu/health/system/files/2021-12/2021_companion_en.pdf

problematic. Russia's invasion of Ukraine, with many refugees arriving from Ukraine to find shelter in the EU for a short or longer period of time, will also inevitably increase the burden of NCDs and in particular of mental illness in EU countries, with substantial impact on countries' resources. Working harder and smarter to reduce the burden of NCDs should now more than ever be part of our efforts.

Reducing the burden of NCDs

With the **EU NCD Initiative**¹⁶, the European Commission wants to help EU countries implement more effective strategies and interventions to combat NCDs. The initiative includes five strands through which policy implementation and effective action of EU countries' health authorities and stakeholders could be reinforced and supported: 1. health determinants, a horizontal strand that applies to all major NCDs, 2. diabetes, 3. cardiovascular diseases, 4. chronic respiratory diseases, and 5. mental health and neurological disorders. Annex 3 provides more information about the rationale for selecting these five strands.

Within each of these strands, the Initiative will address important transversal themes, such as the reduction of health inequalities within and across EU countries, including the empowerment of people and communities and multisectoral actions¹⁷; effective screening approaches; the implementation of age-, gender-, and culture-sensitive interventions; and health system redesign to adopt a life course approach and prevention perspective, improve people-centredness and integration of care to prevent and better manage NCDs, also in the context of multimorbidity.

The focus of the EU NCD Initiative is on **health promotion and disease prevention**, this arguably being one of the most underinvested areas. Nevertheless, and reflecting the experience with Europe's Beating Cancer Plan, the European Commission welcomes countries' competent authorities to identify and prioritise actions within a broader spectrum.

The initiative provides opportunities and demonstrates the added value of a collaborative approach to combat NCDs at EU level, namely in:

- Areas of EU (legal) remit: tobacco advertising, promotion and sponsorship (Tobacco Advertising Directive), tobacco product regulation (Tobacco Products Directive – including labelling, ingredients, quality and safety measures), smoke-free environments (Council Recommendation), alcohol, tobacco and excise duties, alcohol labelling, alcohol marketing regulation, occupational health and safety, environmental protection, audio-visual media services, cross-border public procurement and healthcare, Value Added Tax, etc.;
- Topics with major initiatives and political guidance: European Social Pillar, European Child Guarantee, European Green Deal, Farm to Fork Strategy, Economy that works for people, Europe Fit for the Digital Age, cancer screening recommendations, etc.;
- Areas of economies of scale or for which scientific developments should translate into similar approaches for evidence-based (health) systems, interventions, and policymaking. This may include the European Cancer Code or collaboration on better feedback to policy or on setting research agendas to effectively address gaps while avoiding overlaps and waste;
- Sharing of good practices taking advantage of the EU as a natural test bed for experimentation and evaluation of different approaches and interventions, possibly advancing towards increased coordination of methods and standards;

¹⁶ https://ec.europa.eu/health/non-communicable-diseases/overview_en

¹⁷ For inspiration and support see WHO Toolkit for developing a multisectoral action plan for noncommunicable diseases: overview. Link: https://www.who.int/publications/i/item/9789240043596?utm_source=Policy+and+public+affairs+updates+from+WCRF+International&utm_campaign=e838f64e2d-EMAIL_CAMPAIGN_ppa-who-euro-obesity-report&utm_medium=email&utm_term=0_466546a81f-e838f64e2d-275545117

- Voluntary collaboration and peer support, considering that avoiding pitfalls, learning from others' mistakes, and leaning on each other is especially important when addressing complex, controversial issues, or topics where important legitimate interests collide or where long-term horizons and action are required but difficult to implement;
- Direct management, indirect management and shared management programmes that can boost, expand, and accelerate the investment in key areas for fighting the burden of NCDs, from health promotion and disease prevention, to building primary care centres, and supporting professional training to testing new cross-silo approaches.

While focusing on health promotion and disease prevention, this Initiative may also support better knowledge and data; early detection; diagnosis and treatment of NCDs; and the quality of life of people living with NCDs.

The above will be accomplished in complementarity and synergy with Europe's Beating Cancer Plan¹⁸. Europe's Beating Cancer Plan and the EU NCD Initiative will be aligned by their joint focus on the areas of health promotion and disease prevention, as well as on early detection.

¹⁸ Launched in February 2021, Europe's Beating Cancer Plan aims to tackle the entire disease pathway, focusing on the key action areas where the EU can add the most value: (1) health promotion and disease prevention; (2) early detection; (3) diagnosis and treatment; and (4) quality of life of people living with (a history of) an NCD. Including the EU Mission – Cancer https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/cancer_en

2. Pursuing ambitious action

This chapter provides an overview of possible areas for action per strand, with a focus on ambitious policy and population-wide approaches, as requested by several EU countries. The purpose is to inspire EU countries to identify their priorities and choose their preferred course of action under the EU NCD Initiative, at national, regional or local level, also using their own funding. The following table highlights some of the priorities discussed by EU countries and provides examples of action.

Table 2. Highlights and examples of action

Highlights (among the priorities discussed by EU countries)		Examples of action
Transversal theme		
Health inequalities	Reduce health inequalities	Pilot-testing a plan to reduce health inequalities, specifically by addressing social determinants
Health determinants		
Tobacco and related products	A 'Tobacco-Free Generation' where less than 5% of the population uses tobacco by 2040*	Coordinating and supporting the enforcement of the EU tobacco control framework and its adaptation to market developments
Alcohol	Reduce harmful alcohol consumption* ¹⁹	Coordinating and supporting the enforcement of existing regulations; Development of an information and training package for health professionals and consumers
Nutrition	Improve the nutritional quality of the food available at (physical and online) supermarkets and canteens*	Pilot-testing a plan to introduce best practices related to food reformulation, procurement and marketing , and to the EU school milk, fruit and vegetables scheme*
Diabetes and CVD		
	Increase early detection of diabetes and CVD	Pilot-testing a plan to improve screening for (high-risk) diabetes and CVD
	Improve care and management of diabetes and CVD	Pilot-testing an integrated care model adjusted to multi-morbidity and encompassing prevention
Chronic respiratory diseases		
	Improve care and management of chronic respiratory diseases	Improve care and management of chronic respiratory diseases
Mental health and neurological disorders		
	Setting up supportive structures, mechanisms and processes for integrated policies and actions to support mental health	Pilot-testing a plan to include Mental Health in All Policies

* Supporting Europe's Beating Cancer Plan

¹⁹ The WHO Global Alcohol Action Plan has the objective to reduce alcohol consumption by 20% by 2030 (baseline 2010): https://cdn.who.int/media/docs/default-source/alcohol/alcohol-action-plan/first-draft/global_alcohol_action_plan_first-draft_july_2021.pdf?sfvrsn=fcdab456_3&download=true

2.1. An integrated approach

Major NCDs share many risk factors, which could be addressed more effectively and efficiently by an integrated and coordinated approach. The EU NCD Initiative therefore strongly encourages transversal actions supporting a person-centred pathway, including health promotion, disease prevention, screening and early detection/diagnosis, treatment, rehabilitation and support for quality of life.

2.1.1 Possible priority areas

Priority areas for transversal action could be:

- Reducing health inequalities and the overall burden of NCDs by addressing social determinants (e.g., poverty, education level), health literacy and digital literacy;
- (Digital) tools to support health promotion, disease prevention and management;
- Integration of health promotion and disease prevention in the health system;
- Enhancing and implementing effective screening approaches; including improving access to and participation in screening programmes by tackling barriers and by specific actions to better reach population sub-groups that are less likely to participate in screening (ethnic or linguistic minorities, people with limited health literacy or other vulnerable or hard-to-reach groups);
- Implementing (updated) evidence-based guidelines for healthcare professionals;
- Health system redesign to deliver person-centred and integrated care;
- Age-, gender- and culture-sensitive strategies for health promotion, disease prevention and management;
- Regulation and support for people with NCDs and their caregivers to facilitate social and labour participation;
- Regulation and interventions to support the availability of NCD data, including data on determinants, for decision-makers.

These areas of work are described in more detail in Annex 4. A list of possible actions in an integrated approach is included in Annex 5, to inspire countries to consider the implementation of high-impact transversal actions within or alongside each of the strands.

2.1.2 EU countries' views

The table below shows the EU countries' views on possible priority areas with respect to transversal actions that apply to all strands of the NCD Initiative.

Table 2.1.1. Priority areas indicated by EU countries

Integrated approach	Number of EU countries that endorse the priority areas
Reducing health inequalities by addressing social determinants and health literacy	16
Health system redesign to deliver person-centered and integrated care	16
Age-, gender- and culture-sensitive health promotion, disease prevention and management	14
Supporting people with NCDs and their caregivers to remain active and participate in the labour market	10
Effective screening approaches	8
Improving the availability of NCD data for decision-makers	2
Digital tools to support health promotion, disease prevention and management	2

Integration of health promotion and disease prevention in the health system	2
Implementing (updated) evidence-based guidelines for healthcare professionals	1

2.2. Health determinants

Major lifestyle-related risk factors of NCDs are tobacco use, harmful alcohol consumption, an unhealthy diet and physical inactivity²⁰. Effective health promotion and preventive strategies that address both individual behaviours and facilitate healthy choices are needed to substantially reduce the prevalence and mortality of NCDs. Considering that improved health promotion and disease prevention can reduce the prevalence of NCDs by as much as 70%, implementing such integrated strategies on a large scale within the EU could generate substantial health and wellbeing gain. Particular attention must be paid to social determinants, as these are responsible for large inequalities in the prevalence and mortality of NCDs; therefore, interventions aimed at preventing NCDs must always take into account an equity approach.

While there is substantive knowledge of the major determinants underlying NCD occurrence and progression, policy interventions that can have a significant impact have not been implemented to their full potential within the EU. In 2018, no more than 2.8% of total health expenditure in the EU was spent on prevention²¹, whereas the costs of treating NCDs are high. In addition, despite the high expenditure on NCD management, many patients experience the quality of care as suboptimal; they experience a lack of care coordination and integration, little involvement in decision-making and co-creation, and unmet needs²². These deficiencies are even more strongly felt by people with multimorbidity.²³

Actions under this strand will contribute to **reduce the risks of developing NCDs by focusing on health promotion, in a population approach, and disease prevention**. This strand of the Initiative therefore welcomes actions to address health determinants with a focus on **lifestyle determinants**, in particular those that contribute to the development of the major NCDs: tobacco and related products use, harmful consumption of alcohol, unhealthy diets and physical inactivity. Addressing these lifestyle determinants will also reduce the occurrence of personal risk factors in many people, such as high blood pressure, glucose intolerance and type 2 diabetes, overweight and obesity²⁴. Health determinants other than lifestyle determinants may also be addressed, depending on the priorities indicated by EU countries and in cooperation with relevant Commission departments. The actions under this strand may be complemented by specific actions under the other strands, while also paying attention to the reduction of health inequalities element.

²⁰ https://www.who.int/health-topics/noncommunicable-diseases#tab=tab_1

²¹ 3% of healthcare expenditure spent on preventive care - Products Eurostat News - Eurostat (europa.eu)

²² Fradgley EA, Paul CL, Bryant J. A systematic review of barriers to optimal outpatient specialist services for individuals with prevalent chronic diseases: what are the unique and common barriers experienced by patients in high income countries? *Int J Equity Health* 2015; 14: 52. doi:10.1186/s12939-015-0179-6

²³ van der Aa MJ, van den Broeke JR, Stronks K, et al. Patients with multimorbidity and their experiences with the healthcare process: a scoping review. *J Comorb* 2017; 7(1): 11-21. doi:10.15256/joc.2017.7.97

²⁴ Obesity is here addressed as a determinant of major NCDs. At the same time it is recognised that views differ on whether obesity should be addressed as a determinant or as a NCD in itself.

2.2.1 Possible priority areas

EU countries may wish to introduce:

- Ambitious policies and interventions to reinforce a healthy lifestyle and prevent unhealthy behaviours, by addressing healthy lifestyles in the health system in an integrated way, by improving health literacy and awareness raising campaigns (also using social media or other channels to reach all population groups) and supporting interventions for smoking cessation, guidelines and support for brief interventions on alcohol, reducing aggressive online and TV marketing to children and teenagers, setting targets for food reformulation, using behavioural approaches to promote healthy choices in canteens, revising public procurement guidelines for purchasing food, launching actions to fight physical inactivity in the workplace;
- A 'Health-in-All-Policies' approach, or increased coordination of work between different ministries, to reinforce the collaboration between health promotion and disease prevention services and occupational health and safety in the workplace, or to improve the nutritional balance of food provided to the most disadvantaged population groups;
- Policies to reduce social inequality, improve housing, address climate change²⁵, or reduce exposure to air pollution or noise, to asbestos, or to pesticides.

Suggested priority areas in this strand are:

1. Control the use of tobacco and related products²⁶ among the general population;
2. Prevent children, adolescents, and young adults from starting to use tobacco and related products;
3. Reduce the harmful consumption of alcohol among the general population;
4. Prevent the consumption of alcohol among children, adolescents, and young adults;
5. Reduce unhealthy eating, physical inactivity, overweight and obesity among the general population;
6. Reduce unhealthy eating, physical inactivity, overweight and obesity among children and adolescents;
7. Creating healthy (physical and online) environments.

Annex 4 describes the above priority areas in more detail, and also includes some examples of specific actions that countries may wish to implement in these areas. A more extensive list of possible actions is included in Annex 5.

²⁵ For example, the French government requires companies with 500 or more employees and financial institutions to report Corporate Social Responsibility as described in the most recent IPCC report.
https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf

²⁶ Tobacco and related products include for instance cigars, waterpipe tobacco, heated tobacco products (HTPs), e-cigarettes and herbal products for smoking. Other relevant products include, among others nicotine-free e-cigarettes or nicotine pouches. For example e-cigarettes can be a gateway to smoking for young people. Link:
https://ec.europa.eu/health/system/files/2021-04/scheer_o_017_0.pdf.

2.2.2 EU countries' views

The table below shows the EU countries' views on possible priority areas within the health determinants strand.

Table 2.2.1. Priority areas indicated by EU countries

Health determinants	Number of EU countries that endorse the priority areas
Prevent children, adolescents, and young adults from starting using tobacco and related products	17
Reduce unhealthy eating, physical inactivity, overweight and obesity among the general population	16
Reduce unhealthy eating, physical inactivity, overweight and obesity among children and adolescents	16
Creating healthy environments	16
Reduce tobacco and related product use among the general population	13
Reduce the harmful consumption of alcohol among the general population	12
Prevent the consumption of alcohol among children, adolescents and young adults	12
Control smoking of tobacco and related products among the general population	2
To reduce the prevalence of tobacco use (e.g., continuous monitoring of tobacco use and of the impact of the tobacco control policy; protecting people from tobacco smoke by implementing new smoke-free spaces; ensuring the implementation of legislation related to novel tobacco products and avoid legislative gaps in the face of new forms of use; raising taxes on tobacco; implementing standardised packaging; enforcing legislation on advertising, promotion and sponsorship ban for emerging tobacco products and other relative products and brands).	1

2.2.3 Collaborative action

Relevant for the health determinants strand, under the 2022 EU4Health Work Programme a Joint Action is planned. In collaboration with Europe's Beating Cancer Plan²⁷, this will allow EU countries to readily find support to implement some of their priorities as identified in the EU NCD Initiative.

Moreover, a call for proposals is planned for stakeholders to contribute to implement priority actions.

Based on the discussions and input received from EU countries, possible work packages below have been identified as possible options to translate their priorities above into actions.

²⁷ Coordination at the level of governance will take place within the SGPP; both the subgroup on cancer and the subgroup on NCDs will be informed of each other's streams of work and actively propose synergies.

Table 2.2.2. Health promotion and NCD prevention by addressing health determinants

Work Packages		Content	
0	Integrated approach	Ensure that all work packages cover transversal aspects such as health information, health inequalities, social determinants, vulnerable population groups, health literacy and digital literacy, commercial determinants ²⁸ and age/gender/culture sensitivity. Suggestions:	
		Health information	Design/review and pilot-test a plan to improve health information to increase awareness of NCDs and their risk factors among the general population, vulnerable population groups, and among professionals (health sector, schools/training, work sector, etc.)
		Health inequalities and social determinants	Design/review and pilot-test a plan to reduce health inequalities , including by addressing social determinants . For example, design/review and pilot-test a plan to include health determinants in the efforts to fight poverty and exclusion and reaching out to vulnerable groups, and to integrate equity and social determinants in relevant interventions and plans.
		Health literacy and digital literacy	Design/review and pilot-test a plan to address health literacy and digital literacy . (Complementing Europe's Beating Cancer Plan initiatives aiming to improve health literacy on cancer risks and determinants.)
		Health in All Policies (HiAP)	Design/review and pilot-test a plan to achieve a Health-in-All-Policies approach, including, for example: • Improvements of intra-government governance and policy coherence; • Increase of the use of health impact assessment; • Revision of urban planning guidelines (zoning/food deserts, soft mobility, marketing permits, water fountains, green areas, noise, air quality, etc.). (Possible links to the Sustainable and Smart Mobility Strategy.) Increase cooperation with health and safety at work (*see suggestions under the table for Health in All Policies and work-based interventions below)
		Work-based interventions (as part of HiAP)	Encourage companies to act for the promotion of workers' health , using resources at their disposal, by making recommendations on healthy lifestyles, stop smoking, encouraging the practice of physical activity by providing access to dedicated areas on the premises or by facilitating access to dedicated external structures, encouraging the creation of internal sports teams, providing bicycle garages, encouraging healthy nutrition through the provision of nutritionally balanced dishes in canteens, providing water fountains, establishing extended smoke-free areas, promoting complementary educational measures, such as the promotion of the European Code Against Cancer; training of managers on prevention of psychosocial risks and harassment at work.

²⁸ Commercial determinants of health are the conditions, actions and omissions by corporate actors that affect health.

1	Tobacco and related products use	Actions specific for tobacco and related products ²⁹ use from the possible priorities section ³⁰ :	
		Tobacco-free generation	Design/review and pilot-test a plan to achieve a tobacco-free generation , including support action for end-game policies (sharing of the New Zealand and Danish experience, twining of countries with lower/higher prevalence rates of tobacco and related products use and/or of countries with little/more reduction of prevalence rates of tobacco and related products use).
		Regulation and taxation	Design/review and pilot-test a plan to improve compliance and enforcement of existing regulation . Ensure implementation of policies to tobacco and related products . Limit cross-border purchasing of tobacco and related products by private individuals. Support evidence gathering for raising taxation on tobacco and related products . Support the implementation of the WHO FCTC .
		Commercial determinants	Design/review and pilot-test a plan to more effectively enforce regulation on advertising of tobacco and related products .
		Brief interventions	Design/review and pilot-test a plan to improve cessation efforts (use of tobacco and related products), including by increasing brief interventions .
		Use of tobacco and related products by youth	Implement additional actions to limit youth access to traditional and emerging tobacco and related products.
		Healthy environment	Limit access (e.g., geographic, such as school areas, online sales, etc.)
		Tobacco control education and research plans	Update evidence of the effects of tobacco and related products on public health and individual health.
2	Harmful alcohol consumption	Actions specific for alcohol from the possible priorities section:	
		Health-in-All-Policies approach	Design/review and pilot-test a plan to increase the coherence of all alcohol-related policies (HiAP) .
		Regulation and taxation	Design/review and pilot-test a plan to reinforce compliance with existing regulations and review their effectiveness. Improve coherence with fiscal policies , including by considering the WHO recommendations. Design/review and pilot-test a plan to enforce a minimum number (per 100 000 people) of sobriety checkpoints .

²⁹ Tobacco and related products include for instance cigars, waterpipe tobacco, heated tobacco products (HTPs), e-cigarettes and herbal products for smoking. Other relevant products include, among others nicotine-free e-cigarettes or nicotine pouches.

³⁰ Complementing the Joint Action on Strengthening cooperation on tobacco control 2.

		Commercial determinants	Design/review and pilot-test a plan to more effectively frame alcohol advertising , in particular in digital and social media. In digital (but also traditional) media contexts, a global and comprehensive approach should be taken to remove alcohol advertising, as far as possible, from all contexts.
		Improve knowledge and raise awareness	Design/review and pilot-test a package of scientifically accurate information , based on research that is not industry-funded, for both the general population/customers and healthcare professionals.
		Identify and treat individuals at risk of/with harmful ³¹ consumption of alcohol within the healthcare system	Design/review and pilot-test a plan to increase the capacity of healthcare systems to identify and treat individuals at risk of/with harmful consumption of alcohol by enhancing screening and brief interventions, including pregnant women. <i>(Brief interventions as well as developments of treating protocols can benefit from the Far Seas project (far-seas.eu))</i>
3	Nutrition	Actions specific for nutrition from the possible priorities section:	
		Health in All Policies	Design/review and pilot-test a plan to increase the coherence of all nutrition-related policies (HiAP) . Design/review and pilot-test a plan to increase the implementation at a wider scale of the public procurement, reformulation and marketing policies piloted in Remap.
		Regulation and taxation	Promote food reformulation and develop comparable public procurement standards based on nutrition guidelines. Improve coherence with fiscal policies. Promote the reduction of portion sizes . Implement a nutrient profile model.
		Commercial determinants	Develop coordinated approaches to more effectively frame advertising of food high in fat, sugar or salt , in particular on the digital and social media areas. Design/review and pilot-test a plan to effectively promote that shelf placement, promotion policies, packaging of own brands, nudging, etc. in major distribution (supermarkets) contribute to the consumer opting for the healthier choice. <i>(This could be seen in relation to initiatives on reducing online marketing to children of products high in sugar, fat and salt and initiatives on access to information provided in a child-friendly way, to secure a coherent approach to children's nutrition (from the EU Strategy on the Rights of the Child).</i>

³¹ Harmful consumption of alcohol is broadly defined as “drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as patterns of drinking that are associated with increased risk of adverse health consequences” (Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization; 2010: https://www.who.int/substance_abuse/publications/global_strategy_reduce_harmful_use_alcohol/en/, accessed 19 April 2020).

		School-based interventions	Design/review and pilot-test a plan to introduce best practices supporting the EU school milk, fruit and vegetables scheme (collect best practices, develop innovative approaches, reach out to vulnerable groups, test behavioural insights). Design/review and pilot-test a plan to improve food offered in school canteens . <i>Interesting examples: Swedish Food Agency, Copenhagen municipality, Best-ReMaP Joint Action³²</i>
		Workplace-based interventions	Design/review and pilot-test a plan to improve food offered in work-place canteens . <i>See also work-based interventions under Integrated approach.</i>
		Identify and treat individuals with unhealthy diets within the healthcare system	Design/review and pilot-test a plan to increase the capacity of healthcare systems to identify and treat individuals with an unhealthy diet and enhance brief interventions.
4	Increasing physical activity	Actions specific for physical activity from the possible priorities section:	
		Health in All Policies	Increase cooperating with health and safety at work . <i>See also work-based interventions under Integrated approach.</i>
		Identify and treat individuals with physical inactivity issues within the healthcare system	Design/review and pilot-test a plan to increase the capacity of healthcare systems to identify and treat individuals with physical activity/inactivity issues and enhance brief interventions and prescription of physical activity. <i>(The EUPAP project supporting the replication of the prescription of physical activity as a best practice is relevant.)</i>
		School-based interventions	Design/review and pilot-test a plan to increase extra-curricular physical activity in school settings .
		Workplace-based interventions	Design/review and pilot-test a plan to promote an active lifestyle in the workplace , for example through sedentary behaviour programmes or incentives to use public transportation/biking for commuting to the workplace.
		Healthy environment	Environmental changes to promote active lifestyles (for example, active transportation systems)
5	Commercial determinants	<i>Suggestions to address commercial determinants have been integrated in the suggested work packages on tobacco and related products use, harmful alcohol consumption, nutrition and physical activity above. Countries may wish to combine their actions to address commercial determinants in a dedicated work package.</i>	

³² <https://bestremap.eu/>

2.3. Diabetes

Diabetes is a group of metabolic disorders that are identified by the presence of chronic hyperglycaemia (raised blood sugar).³³ Two major types³⁴ of diabetes can be distinguished: type 1 diabetes, which is characterised by an insulin deficiency because of an auto-immune and definitive destruction of beta cells in the pancreas³⁵, and type 2 diabetes, which results from a progressive deterioration of beta cell function, typically combined with varying degrees of insulin resistance³⁶.

Although type 1 diabetes is far less common than type 2 diabetes, the disease has a major impact on the lives of patients (already from early childhood or adolescence) and their families; it requires life-long treatment with insulin and daily self-management. It may negatively impact children's and adolescents' development, make it more difficult for them to attend school, which may result in a lower educational attainment. At all ages, but particularly during adolescence, type 1 diabetes patients may develop mental health problems, such as low self-esteem, anxiety or depression. Furthermore, people with type 1 diabetes may have difficulty establishing and maintaining social relationships, participating in social activities; it may cause reproductive dysfunction, complicate labour participation, and affect the financial position of households. Type 1 diabetes cannot be prevented, but effective disease management, which consists predominantly of self-management and a healthy lifestyle, can prevent complications and premature death.

Type 2 diabetes is the most common type of diabetes, accounting for more than 95% of all cases³⁷. It is mainly driven by lifestyle factors and can be prevented or delayed by a healthy diet, regular physical activity, maintaining a normal body weight and not using tobacco³⁸. As prevalence rates increase with age, mostly past 40 years of age, nearly half of all people living with type 2 diabetes are adults aged 65 and over³⁹, of whom the great majority also have other long-term conditions such as hypertension, hyperlipidaemia, overweight or obesity, cardiovascular disease or chronic kidney disease⁴⁰. However, it is important to note that type 2 diabetes is now also more frequently diagnosed at younger age, and even in children⁴¹, which relates to increased overweight and physical inactivity among children, adolescents and young adults. The negative impact of type 2 diabetes on young people's lives can be similar to what young people with type 1 diabetes experience.

³³ WHO: Classification of diabetes mellitus 2019. Link: [9789241515702-eng.pdf \(who.int\)](https://www.who.int/news-room/fact-sheets/detail/diabetes)

³⁴ Other types include gestational diabetes, which may occur in pregnant women, and is identified by blood glucose values above normal but below those diagnostic of diabetes. Impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG) are considered intermediate conditions in the transition between normality and diabetes that may result in diabetes type 2, if not managed timely and adequately. (<https://www.who.int/news-room/fact-sheets/detail/diabetes>)

³⁵ Genetics and Diabetes (who.int)

³⁶ Bellary S, Kyrou I, Brown JE, Bailey CJ. Type 2 diabetes mellitus in older adults: clinical considerations and management. *Nat Rev Endocrinol*. 2021 Sep;17(9):534-548. Link: <https://www.nature.com/articles/s41574-021-00512-2#Sec2>

³⁷ Diabetes (who.int)

³⁸ <https://www.who.int/news-room/fact-sheets/detail/diabetes>

³⁹ Khan MAB, Hashim MJ, King JK, Govender RD, Mustafa H, Al Kaabi J. Epidemiology of Type 2 Diabetes - Global Burden of Disease and Forecasted Trends. *J Epidemiol Glob Health*. 2020 Mar;10(1):107-111. Link: <https://www.atlantispress.com/journals/jegh/125921499>

⁴⁰ Iglay K, Hannachi H, Joseph Howie P, Xu J, Li X, Engel SS, Moore LM, Rajpathak S. Prevalence and co-prevalence of comorbidities among patients with type 2 diabetes mellitus. *Curr Med Res Opin*. 2016 Jul;32(7):1243-52. Link: <https://www.tandfonline.com/doi/full/10.1185/03007995.2016.1168291?needAccess=true>

⁴¹ <https://www.who.int/news-room/fact-sheets/detail/diabetes>

The number of adults diagnosed with diabetes in the EU has almost doubled over the last decade, from about 16.8 million in 2000 to 32.3 million in 2019. The increase among men is even larger (+56%), as men are more prone to develop diabetes due to biological factors and an increased risk when being overweight⁴². The International Diabetes Federation estimates the number of adults aged 20 to 79 years living in the European region with diabetes at 61.4 million in 2021, of whom 21.9 (35.7%) with undiagnosed diabetes. The economic burden of diabetes in the European region is huge, with an estimated total diabetes related health expenditure of more than EUR 2 700 per person in 2021⁴³. Mortality linked to diabetes is also substantial. Its lethal effect is even larger when taking into account that diabetes increases the risk of cardiovascular diseases and that people with diabetes who are affected by COVID-19 run a higher risk of becoming severely ill⁴⁴.

The (age-standardised) prevalence of diabetes varies substantially across European countries, with 3.2% of the Irish population aged 20-79 years in 2019 being diagnosed with diabetes compared to 10.4% of the German population of the same age. The prevalence rate seems to have stabilised in recent years in particular in the Nordic countries, whereas it has continued to go up slightly in central, eastern and southern European countries⁴⁵. Inequalities within countries also exist: adults with the lowest level of education are more than twice as likely to report having diabetes than those with the highest level of education across EU countries. It should be mentioned that this difference can partly be explained by older people being statistically overrepresented amongst adults with a low level of education.

Many countries have developed policy interventions to decrease the burden of diabetes, but the investment in and implementation of comprehensive strategies for the prevention and treatment of diabetes vary⁴⁶.

2.3.1 Possible priority areas

As mentioned above, type 1 diabetes cannot currently be prevented, but complications can be prevented or delayed by effective disease management, which consists for the largest part of self-management and a healthy lifestyle. The burden of type 2 diabetes can be reduced by interventions that support and facilitate a healthier lifestyle, in particular a healthy diet, physical activity and not smoking tobacco⁴⁷. The growing number of children and adults with overweight or obesity requires decisive action. Comprehensive interventions that support individual behaviour change and healthy choices as well as address social determinants should be considered. Potentially effective interventions to address these determinants have been mentioned in the previous section on health determinants.

Several actions to reduce the burden of diabetes have been suggested in the sections '2.1 Integrated approach' and '2.2 Health determinants'. For instance, countries may wish to collaborate on the availability, standardisation and use of health data for diabetes surveillance, management and quality of care improvement and on empowering people to prevent or self-manage diabetes through implementing digital supportive tools (integrated approach). Furthermore, as mentioned in section 2.2 Health determinants, countries may work on (further) implementing cost-effective strategies to promote health and prevent type 2 diabetes among the general population. This section suggests some additional areas countries may wish to work on,

⁴² 2020_healthatglance_rep_en.pdf (europa.eu)

⁴³ <https://diabetesatlas.org/data/en/region/3/eur.html>

⁴⁴ 2020_healthatglance_rep_en.pdf (europa.eu)

⁴⁵ 2020_healthatglance_rep_en.pdf (europa.eu)

⁴⁶ https://www.euro.who.int/__data/assets/pdf_file/0009/307494/National-diabetes-plans-Europe.pdf

⁴⁷ <https://www.who.int/news-room/fact-sheets/detail/diabetes>

to reduce the burden of diabetes **among high-risk populations and people with undiagnosed or diagnosed diabetes**:

- Prevent the onset of type 2 diabetes among high-risk populations;
Reduce undiagnosed diabetes by raising awareness, targeted screening of high-risk individuals or early detection approaches, within a comprehensive frame shared with cardiovascular disease;
- Prevent or delay complications by ensuring (access to) high-quality diabetes care;
- Support diabetes patients' self-management;
- Implement care models that integrate proactive diabetes management with person-centred, personalised care;
- Support people with diabetes of all ages and their families in living with diabetes;
- Increase awareness of the impact of diabetes for functioning and participation, and fight stigmatisation of people with diabetes.

In Annex 4 more information is provided on the suggested areas for action, with some examples of interventions or good practices implemented in countries. A more extensive list of large-scale and more targeted actions to reduce the burden of diabetes (in addition to those mentioned in the health determinants strand) can be found in Annex 5.

2.3.2 EU countries' views

The table below shows the EU countries' views on possible priority areas within the diabetes determinants strand.

Table 2.3.1. Priority areas indicated by EU countries

Diabetes	Number of EU countries that endorse the priority areas
Prevention of the onset and progress of diabetes type 2 (<i>among high-risk populations</i>)	10
Improved diabetes care and management	10
Early detection of diabetes	8
Increased labour participation of adults with diabetes at working age	5
Linkage and use of healthcare data related to diabetes	1
Early detection of diabetic retinopathy	1
Early detection of diabetic nephropathy	1
Diabetic foot prevention	1
Reduce undiagnosed diabetes by raising awareness, targeted screening or early detection approaches	1
Prevent or delay complications by ensuring (access to) high-quality diabetes care	1
Implement care models that integrate proactive diabetes management in person-centred care	1
Support people with diabetes and their families in living with diabetes	1

2.3.3 Collaborative action

Relevant for the diabetes strand is that a Joint Action (combined with cardiovascular diseases) will be launched under the 2022 EU4Health Work Programme. This will allow EU countries to readily find support to implement some of their priorities as identified in the EU NCD Initiative. It will be complemented by a call for proposals supporting stakeholder action towards the same objectives.

Combined action for diabetes and cardiovascular disease prevention aims at binding a comprehensive, patient-centred approach, with health care resources and good practices for type

2 diabetes and cardiovascular risk factors, that are closely intertwined, share common health determinants and complications.

2.4. Cardiovascular diseases

Cardiovascular diseases are a vast group of disorders that include diseases of the heart, vascular diseases of the brain and diseases of blood vessels. Many of them are related to a process called atherosclerosis and include coronary heart disease, cerebrovascular disease, and peripheral arterial disease. Other cardiovascular diseases, which are not always related to atherosclerosis, include rheumatic heart disease (damage to the heart muscle and heart valves from rheumatic fever, caused by streptococcal bacteria), congenital heart disease (malformations of heart structure existing at birth), cardiomyopathies and cardiac arrhythmias⁴⁸.

Cardiovascular diseases (CVD) are the main cause of mortality in the EU resulting in 1.8 million deaths every year, which accounts for 37% of deaths in the EU⁴⁹. In addition, in 2019⁵⁰ it was estimated that almost 63 million people live with cardiovascular diseases in the EU. CVD are estimated to cost the EU economy EUR 210 billion a year⁵¹ (including healthcare costs, productivity loss, burden of informal care). Multimorbidity is a key challenge in this area and in particular the prevention and management of cardiovascular diseases should be directly linked with the prevention and management of type 2 diabetes.

Besides gender, age, socioeconomic position, immigration status, environmental factors and a family history of the disease, modifiable risk factors for cardiovascular diseases include hypertension, diabetes, obesity, hypercholesterolemia, tobacco and related products use, stress, sleep disorders, sedentary lifestyle, harmful alcohol consumption and unhealthy eating⁵².

Healthy eating, quitting tobacco and related products, reduced alcohol consumption, sufficient physical activity, stress reduction, screening for hypertension, diabetes and familial hypercholesterolemia, and timely preventive medicine and lifestyle interventions will reduce the onset and undesired outcomes of these diseases⁵³. Postponing or evading the onset of cardiovascular disease by effective prevention will contribute the most in terms of healthier life years, longer quality of life, less healthcare costs and less premature mortality. There are opportunities for combined risk assessments for cancer and CVD risks, as both disease groups share a number of modifiable risk factors and pathophysiological mechanisms and often co-exist⁵⁴.

⁴⁸ Cardiovascular diseases (CVDs) (who.int)

⁴⁹ OECD. Health at a Glance: Europe 2020. Link: 82129230-en.pdf (oecd-ilibrary.org)

⁵⁰ GBD Results Tool | GHDx (healthdata.org)

⁵¹ Wilkins, E, Wilson, L, Wickramasinghe, K, Bhatnagar, P, Leal, J, Luengo-Fernandez, R, Burns, R, Rayner, M & Townsend, N 2017, European Cardiovascular Disease Statistics 2017. European Heart Network, Brussels.

⁵² World Heart Federation. The impact of alcohol consumption in cardiovascular health. Myths and measures. Policy Brief. 2022. Available at: The Impact of Alcohol Consumption on Cardiovascular Health: Myths and Measures - World Heart Federation (world-heart-federation.org)

⁵³ <https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/2021-ESC-Guidelines-on-cardiovascular-disease-prevention-in-clinical-practice>

⁵⁴ Handy CE, Quispe R, Pinto X, Blaha MJ, Blumenthal RS, Michos ED, Lima JAC, Guallar E, Ryu S, Cho J, Kaye JA, Comin-Colet J, Corbella X, Cainzos-Achirica M. Synergistic Opportunities in the Interplay Between Cancer Screening and Cardiovascular Disease Risk Assessment: Together We Are Stronger. *Circulation*. 2018 Aug 14;138(7):727-734. doi: 10.1161/CIRCULATIONAHA.118.035516. PMID: 30359131.

2.4.1 Possible priority areas

Note that the area of primary prevention of cardiovascular diseases is also covered in the first strand on health determinants, addressing the main risk factors of cardiovascular diseases and other NCDs. Furthermore, the integrated approach covered the topic of health inequalities, which is also an important priority area for CVD^{55, 56}. Continuous monitoring, specific policies at the EU-level as well as harmonised data registries in the EU countries, could help to identify and effectively address inequalities, including inequalities in CVD.

Furthermore, countries may wish to implement a set of actions to increase efforts in the prevention and management of cardiovascular diseases. Possible priority areas that countries may wish to work on in this strand are:

- Prevention of the onset and progress of cardiovascular diseases;
- Early detection of risk factors and cardiovascular diseases;
- Improving (access to) high-quality CVD care, by learning from data on prevalence and (quality of) care as well as socio-economic determinants, by personalised or stratified medicine and by workforce training;
- Improving patient empowerment for CVD prevention and CVD self-management;
- Increase awareness of the impact of CVD.

In Annex 4 these areas are described in more detail, including some examples of concrete actions countries may wish to implement in these areas. A more extensive list of actions for each of the suggested priority areas can be found in Annex 5.

2.4.2 EU countries' views

The table below shows the EU countries' views on possible priority areas within the cardiovascular diseases strand.

Table 2.4.1. Priority areas indicated by EU countries

Cardiovascular disease	Number of EU countries that endorse the priority areas
Prevent onset and progress of cardiovascular diseases	12
Early detection of cardiovascular diseases	12
Improved cardiovascular disease care and management	10
Increase labour participation of adults with cardiovascular diseases at working age	6
Improving (access to) high-quality CVD care and self-management support	1

2.4.3 Collaborative action

Relevant for the cardiovascular (and diabetes) strands, a Joint Action will be launched under the 2022 EU4Health Work Programme to allow EU countries to readily find support to implement some of their priorities as identified in the EU NCD Initiative.

⁵⁵ Kist JM et al. Large health disparities in cardiovascular death in men and women, by ethnicity and socioeconomic status in an urban based population cohort. *EClinicalMedicine* 2021 Aug 29; 40: 101120.

⁵⁶ Movsisyan NK, Vinciguerra M, Medina-Inojosa JR, Lopez-Jimenez F. Cardiovascular Diseases in Central and Eastern Europe: A Call for More Surveillance and Evidence-Based Health Promotion. *Ann Glob Health* 2020; Feb 26; 86(1): 21.

Based on the discussions and input received to date, EU countries are invited to comment on the possible work packages below as possible options to translate their priorities above into actions.

Table 2.4.2. Collaborative action on **diabetes and cardiovascular disease**

Work Packages		Content	
0	Integrative approach	Ensure that all work packages cover transversal aspects, such as health information, health inequalities, social determinants, vulnerable population groups, health literacy and digital literacy, age/gender/cultural sensitivity and commercial determinants. Suggestions:	
		Information and raising awareness on diabetes, CVD and their risk factors	Design/review and pilot-test a plan to improve information on diabetes and CVD and their risk factors and raise awareness of these conditions and their risk factors among the general population, and among vulnerable and high-risk groups.
		Health literacy	Improve health literacy specific for diabetes and CVD , in addition to a more general approach to improve health literacy and digital literacy in the suggested collaborative action on Health determinants.
		Data on diabetes and CVD	Design/review and pilot-test a plan to improve the availability, quality/standardisation and use of health data , including, for example, the establishment and networking of diabetes or CVD registries.
		Person-centred pathway from health promotion to disease management and quality of life support.	Support an interconnected person-centred pathway in health systems that provides health promotion, disease prevention, screening and early detection, treatment, rehabilitation and support to quality of life for patients with diabetes and/or cardiovascular diseases.
1	Improve screening for (high risk of) diabetes and CVD	Update plan for opportunistic and population screening; revise guidelines based on scientific updates.	Design/review and pilot-test evidence-based guidelines for population and/or opportunistic screening on diabetes, CVD and clinical risk factors, including, for example, the joint definition of ethical guidance, minimum standards, and packages for the training of healthcare professionals. In this context, consider developing and implementing integrated/combined screening strategies, i.e., for type 2 diabetes, high blood pressure, and hypercholesterolemia.
2	Improve patient care pathways (personalised) and promote integration of care	Design/review and pilot-test a health system model to deliver person-centred and integrated care adjusted to multi-morbidity and encompassing prevention (re-orienting health systems towards health promotion and disease prevention, integrating lifestyle assessment and intervention into the practice of primary care professionals).	

3	Improve support to patients with diabetes and/or CVD, and diabetes/CVD (self-)management, including digital tools	Design/review and pilot-test a plan to improve support to patients' (self-)management of diabetes or CVD, including the use of digital tools as part of the care pathway by healthcare professionals and patients to support disease (self-)management.
4	Increase and support labour participation of people living with diabetes and/or CVD	Design/review and pilot-test a plan to increase and support labour participation of people living with diabetes or CVD. <i>See also work-based interventions under Health determinants, Integrated approach.</i>
5	Improve information for decision-making	(May be considered under the Integrated approach.)

2.5. Chronic respiratory diseases

Chronic respiratory diseases (CRDs) are diseases of the airways and other structures of the lung. Some of the most common are chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension⁵⁷. In addition, interstitial lung disease (ILD) covers a large group of chronic lung diseases that cause scarring (fibrosis) of the lungs. Post-Covid Pulmonary Fibrosis (PCPF) might need attention as well.

Respiratory diseases account for 8% of all deaths in the EU and 3% of all deaths are caused by chronic obstructive pulmonary disease (COPD)⁵⁸. Mortality rates because of respiratory diseases vary not only across EU countries, but also within countries. A larger proportion of men (8.1%) than of women (6.9%) die because of respiratory diseases in the EU (2016). The difference between men and women is most pronounced (>2%) in Cyprus, Latvia, Lithuania and Romania⁵⁹. About 5.7% of the adult EU population reported to have asthma and 4.7% another medically confirmed lower respiratory disease, including COPD⁶⁰.

Although CRDs are not curable, many CRDs, including asthma and COPD, are treatable and to a large extent preventable. Besides genetics, tobacco smoking, chronic exposure to air pollutants (in particular fine particulate matter) and airway allergens, occupational chemicals and dust, and frequent lower respiratory infections during childhood are the major causes of CRDs^{61,62}.

Second-hand exposure to tobacco smoke is a risk factor for CRDs, especially in the case of children and adolescents, as they are at greater risk than adults of being adversely affected by regular second-hand exposure tobacco smoke within their home environments.

Occupational chemicals, dust particles, fungal spores, and certain animal droppings are examples of exposure at the workplace that are important risk factors in developing CRD, and more specifically occupational lung diseases.

⁵⁷ <https://www.who.int/health-topics/chronic-respiratory-diseases>

⁵⁸ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

⁵⁹ Eurostat. Statistics Explained. Respiratory diseases statistics, August 2021. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Respiratory_diseases_statistics&oldid=541149#Self-reporting_of_respiratory_diseases

⁶⁰ Eurostat. Statistics Explained. Respiratory diseases statistics, August 2021. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Respiratory_diseases_statistics&oldid=541149#Self-reporting_of_respiratory_diseases

⁶¹ https://goldcopd.org/wp-content/uploads/2020/11/GOLD-REPORT-2021-v1.1-25Nov20_WMV.pdf

⁶² <https://www.who.int/health-topics/chronic-respiratory-diseases>

Outdoor air pollution accounts for a large proportion of deaths in all European countries and is not only a risk factor for CRD, but also for other NCDs including CVD. Recently, the WHO published the new Air Quality Guidelines (AQG), which are based on convincing scientific evidence about the harms caused by exposure to low levels of conventional air pollutants. The new WHO AQG for both long- and short-term exposure in relation to critical health outcomes indicate levels which are largely lower than the previous WHO AQG published sixteen years ago⁶³. Indoor air pollution is also a risk factor for NCDs including CRD and contributes to a sizeable number of deaths, particularly in countries where solid fuels are still used for heating, warm water and cooking⁶⁴.

Treatment of CRDs can contribute to lowering the individual burden of the disease, by addressing lifestyle factors and the self-management skills of individuals. A minority of patients with asthma have uncontrolled or partially controlled asthma despite intensive treatment (severe asthma). These patients present a special challenge because of the extensive diagnostic evaluation that they need.

2.5.1 Possible priority areas

Countries may wish to implement a set of actions to increase efforts in the prevention and management of chronic respiratory diseases. Possible priority areas that countries may wish to work on (jointly) in this strand are:

- Prevention of the onset and progress of chronic respiratory diseases, in particular COPD, which may include the prevention of smoking tobacco; exposure to second-hand tobacco smoke; prevention of exposure to occupational chemicals and dust; reduction of indoor and outdoor pollutants (e.g., supporting the most recent WHO Air Quality Guidelines⁶⁵);
- Vaccination programmes;
- Early detection of chronic respiratory diseases;
- Ensuring (access to) high-quality CRD care, including rehabilitation programmes;
- Improving CRD self-management support.

In Annex 4 these areas are described in more detail, including some examples of concrete actions countries may wish to implement in these areas, such as: developing a standard way of obtaining relevant data on the burden of disease and risk factors; advocating action; encouraging countries to implement policies for health promotion and prevention; developing simple and affordable strategies for management. A more extensive list of actions for each of the suggested priority areas can be found in Annex 5.

2.5.2 EU countries' views

The table below shows the EU countries' views on possible priority areas within the chronic respiratory diseases strand.

⁶³ <https://www.who.int/news-room/feature-stories/detail/what-are-the-who-airquality-guidelines>

⁶⁴ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

⁶⁵ <https://www.who.int/news-room/feature-stories/detail/what-are-the-who-airquality-guidelines>

Table 2.5.1. Priority areas indicated by EU countries

Chronic respiratory diseases	Number of EU countries that endorse the priority areas
Improved care and management of chronic respiratory diseases to prevent exacerbation and acute events	7
Prevention of onset and progress of chronic respiratory diseases	6
Awareness raising among the general population and professionals	1
Early detection of chronic respiratory diseases	1
Ensuring (access to) high-quality chronic respiratory disease care and self-management support	1

2.5.3 Collaborative action

Suggestions for possible work areas to translate priorities above into actions will be added after additional discussion with EU countries.

2.6. Mental health and neurological disorders

The promotion of mental health and well-being is covered under SDG 3.4, separately from non-communicable diseases. In 2018, ‘mental health and neurological disorders’ was placed within the wider global NCD agenda, when it was added to that agenda as a specific (fifth) disease cluster⁶⁶. The EU NCD Initiative follows this approach.

Mental health

Under this topic, the EU NCD Initiative aims to promote mental health and well-being and encourage their development, prevent and tackle mental health problems and mental disorders, and support people living with mental disorders. The definitions of the main terms used in this section can be found in Annex 4.

Before the onset of the COVID-19 pandemic, mental health problems affected about 84 million people in the EU, amounting to one in every six citizens, at an estimated cost of over EUR 600 billion (more than 4% of GDP)^{67,68}. There were also indications of increased risk of mental health problems among young people aged 12–24 years, especially among those living with chronic health conditions, living in rural areas, and those not in education, training or employment⁶⁹. The **COVID-19 pandemic** exacerbated these already sobering data. A significant decrease in mental well-being and an increase in negative feelings, such as tension/anxiety, loneliness, and feeling downhearted and depressed, was recorded across all age groups since the summer of 2020, reaching its lowest level across all age groups in spring 2021⁷⁰. Increased sleep dysfunction has also been observed among general populations⁷¹. Population groups whose mental health has

⁶⁶ http://www.un.org/ga/search/view_doc.asp?symbol=A%2F73%2FL2&Submit=Search&Lang=E

⁶⁷ https://ec.europa.eu/health/sites/health/files/state/docs/2018_healthatglance_rep_en.pdf

⁶⁸ The most common mental disorder across EU countries is anxiety disorder, followed by depressive disorder, drug and alcohol use disorder, and several severe mental illness, such as bipolar disorder and schizophrenia, see https://ec.europa.eu/health/sites/health/files/state/docs/2018_healthatglance_rep_en.pdf

⁶⁹ https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef19039en.pdf

⁷⁰ Living, working and COVID-19 (Update April 2021): Mental health and trust decline across EU as pandemic enters another year (europa.eu)

⁷¹ Bhat S, Chokroverty S. Sleep disorders and COVID-19. *Sleep Med.* 2022 Mar;91:253-261. doi: 10.1016/j.sleep.2021.07.021. Epub 2021 Jul 18. PMID: 34391672; PMCID: PMC8286239.

been particularly affected by the pandemic include **young people, people with less secure employment, and people with less education or a lower income**⁷².

Suicide mortality rates (the only indicator for mental health within the SDG framework) remained largely unchanged or even declined in the early months of the pandemic⁷³. The longer-term impact of the pandemic on suicide mortality rates is likely to be complex: the pandemic caused disruption and fear, but also triggered protective factors such as feelings of togetherness, hope and resilience.

Anxiety disorders are the most common mental disorders in the EU, followed by depressive disorders, addiction to tobacco, alcohol use disorders (AUDs), and several mental disorders, such as bipolar disorders and schizophrenia. Comorbid physical conditions are common among people with mental health problems and mental disorders: poor mental health increases the risks of additional physical conditions, and physical conditions increasing the risk of poor mental health, such as for diabetes^{74, 75}. People with mental health disorders may therefore benefit from tailored health promoting actions and services.

The impact of poor mental health can **affect people throughout their life course**. Furthermore, mental health problems in early childhood and adolescence increase the risk of poor academic performance⁷⁶ and job opportunities later in life. Adults with mental health problems are less productive at work and more likely to be unemployed. Older people with mental health problems are more likely to be isolated and be less active in their community⁷⁷.

Adversity is an established risk factor for mental health and behavioural problems. Examples of such adversities include poverty, unemployment, financial instability, a low educational level, violence, homelessness, and social isolation⁷⁸. As is described (and underpinned) in more detail in Annex 4, **policies in areas such as education, employment and social protection** can impact positively on mental health and well-being, and support mental health resilience, especially when implemented early in life⁷⁹. A **comprehensive approach to mental health** therefore encourages and supports EU countries to adopt a mental health-in-all-policies approach, and acknowledges the importance of a prevention-oriented perspective. As such, the Healthier Together Initiative will support EU countries to implement high-impact actions across the entire spectrum: 1) preparing the ground for well-being and mental health resilience, by implementing Mental Health in All Policies that create favourable conditions that address environmental and social determinants, and support the development of social and emotional skills in childhood; 2) promoting mental health and preventing mental disorders; 3) providing equitable and timely access to high-quality mental health services; and 4) supporting people with mental health disorders to live their lives as fully as possible by protecting rights, enhancing social inclusion, and tackling stigma.

⁷² OECD. Health at a Glance. Link: <https://doi.org/10.1787/ae3016b9-en>

⁷³ Pirkis J et al., Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries. *Lancet Psychiatry*. 2021 Jul;8(7):579-588.[https://doi.org/10.1016/S2215-0366\(21\)00091-2](https://doi.org/10.1016/S2215-0366(21)00091-2).

⁷⁴ <https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-040617-013629>

⁷⁵ Comorbidity of mental and somatic health problems is also an important factor to take into account in work on NCDs (such as COPD, diabetes or coronary heart disease) and cancer. See, for instance: <https://link.springer.com/article/10.1007/s11606-018-4705-2>

⁷⁶ <https://link.springer.com/content/pdf/10.1007/s00127-020-01934-5.pdf>

⁷⁷ 2018_healthatglance_rep_en.pdf (europa.eu)

⁷⁸ https://apps.who.int/gb/ebwha/pdf_files/EB148/B148_20-en.pdf

⁷⁹ <https://apps.who.int/iris/rest/bitstreams/516560/retrieve>

Neurological disorders

Neurological disorders are conditions characterised as being in or associated with the central or peripheral nervous system. Major noncommunicable neurological disorders are Alzheimer's disease, which is the main cause of dementia, and other forms of dementia, cerebrovascular diseases including stroke⁸⁰, Parkinson's disease, multiple sclerosis, epilepsy, various headache disorders among which migraine, and traumatic brain injuries⁸¹. Many more – both communicable and noncommunicable – neurological disorders exist, often also with a substantial disease burden and premature mortality. These latter diseases are addressed in EU programmes and actions on rare diseases.

Neurological disorders are the leading cause of disease burden in terms of Disability-Adjusted Life Years (DALYs) and second⁸² leading cause of deaths (2016). The four largest contributors of neurological DALYs in 2016 were stroke (42%), migraine (16%), Alzheimer's disease and other dementias (10%), and meningitis (8%), the latter not being an NCD. As the prevalence of the major disabling neurological disorders steeply increases with age, there will be an increasing demand for treatment, rehabilitation and support services for neurological disorders in the coming years in all countries with ageing populations⁸³.

Stroke

Specifically for stroke, research evidence indicates that 90% of all cases of stroke may be preventable by changing modifiable risk factors, with 75% of cases being preventable by **improving behavioural factors such as smoking, poor diet or low levels of physical activity**⁸⁴. These risk factors are being addressed through actions in the 'Health determinants' strand. In addition, there are several medical risk factors for stroke that contribute to its occurrence and progression. Atrial fibrillation is related to 20 to 30% of cases. One approach to address these medical risk factors is by **improving monitoring and screening through communitywide, primary-care-led initiatives**⁸⁵.

Alzheimer's disease and other types of dementia

The prevalence of dementia in people aged over 60 years increased in the EU from 5.9 million in 2000 to an estimated 9.1 million in 2018. A further increase in the number of EU citizens with dementia is expected, to about 14.3 million in 2040⁸⁶.

Although in the onset of dementia various non-modifiable risk factors (e.g., age, gender and genetic predisposition) play an important role, modifiable risk factors may prevent or delay up to 40% of dementias. Twelve modifiable risk factors have been identified, which can be addressed

⁸⁰ Cerebrovascular diseases, including stroke, have been reclassified in the ICD-11 under 'Diseases of the nervous system'; in the NCD initiative document, we follow this reclassification.

⁸¹ GBD 2016 Neurology Collaborators. Global, regional, and national burden of neurological disorders, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Neurology* 2019; 18 (May): 459-480.

⁸² The first leading cause of deaths in 2016 was cardiovascular diseases.

⁸³ GBD 2016 Neurology Collaborators. Global, regional, and national burden of neurological disorders, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Neurology* 2019; 18 (May): 459-480.

⁸⁴ Feigin VL, Roth GA, Naghavi M, et al; Global Burden of Diseases, Injuries and Risk Factors Study 2013 and Stroke Experts Writing Group. Global burden of stroke and risk factors in 188 countries, during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet Neurol.* 2016;15(9):913–924.

⁸⁵ Karnad A, Pannelay A, Boshnak A, Cook R. Stroke prevention in Europe: how are 11 European countries progressing toward the European Society of Cardiology (ESC) recommendations. *Risk Management and Healthcare policy.* 2018;11: 117-125.

⁸⁶ Health at a Glance: Europe 2018: State of Health in the EU Cycle Link: https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-europe-2018_health_glance_eur-2018-en

to prevent dementia, either by reducing the neuropathological damage or increasing and maintaining a person's cognitive reserve: 1. stop smoking, 2. avoid excessive use of alcohol, 3. reduce midlife obesity, 4. reduce air pollution, 5. increase education level, 6. prevent head injury, 7. minimise diabetes, 8. treat hypertension, 9. maintain frequent exercise, 10. reduce the occurrence of depression, 11. treat hearing impairment, and 12. maintain frequent social contact⁸⁷. This opens up possibilities for **public health interventions that can help prevent or delay the onset and progression of Alzheimer's disease and other dementias**, through interventions targeting lifestyle factors and cognitive function across the life course, strategies addressing environmental determinants, and prevention and management of co-morbidities⁸⁸. These actions could be integrated into wider programmes, also taking into account that many modifiable risk factors cluster among socio-economic and otherwise vulnerable communities. Efforts to improve the quality and availability of care for people with dementia should also be coupled with investments in primary prevention measures.⁸⁹

Timely diagnosis of dementia is of utmost importance, yet it is often misdiagnosed. Persons living with dementia may have to wait several years to receive a diagnosis or may not be diagnosed at all. In particular at young age the symptoms of dementia are often misinterpreted. Furthermore, the diagnosis of dementia is more frequently missed among minorities, due to a lack of appropriate diagnostic instruments. The **stigma associated with the disease is also an important barrier** to early diagnosis and care⁹⁰. In the absence of a cure, and with ageing of populations and the rising numbers of people living with dementia, it is highly important to empower and support people living with dementia and their family/carers, to **maintain or improve their quality of life** by strengthening opportunities for enabling, supportive communities and high-quality care provided by multidisciplinary health and social care professionals who have specific knowledge and expertise of dementia.

Parkinson's disease

Current criteria define Parkinson's disease as the presence of bradykinesia combined with either rest tremor, rigidity, or both. However, the clinical presentation of Parkinson's disease is multifaceted and includes many non-motor symptoms. In 2016, there were about 900 000 people living with diagnosed Parkinson's disease in the EU-27¹⁹. However, Parkinson's disease is often recognised very late, while its prevalence is increasing worldwide.

Besides age, risk factors are generally understood as multifactorial and resulting from a gene-environment interaction, such as toxic chemicals and head injury. The causes are partly genetic (10-15%), but most patients lack identifiable genetic mutations. Additional causal associations

⁸⁷ Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. Link: [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)

⁸⁸ WHO Guidelines on risk reduction of cognitive decline and dementia, 2019. Link: <https://apps.who.int/iris/rest/bitstreams/1257946/retrieve>

⁸⁹ Dementia Prevention. Joint Research Centre Health Promotion and Disease Prevention Knowledge Gateway. Link: [Dementia prevention | Knowledge for policy \(europa.eu\)](https://www.euro.who.int/en/health-topics/dementia/prevention)

⁹⁰ Alzheimer's Innovation Readiness Index 2021. Alzheimer's Disease International, 2021. Link: https://www.alzint.org/u/GCOA_AIRI_AlzIndeXReport_FINAL.pdf

include having a relative with Parkinson's disease or tremor, constipation, and being a non-smoker⁹¹. Physical activity and a healthy diet have been identified as protective factors^{92, 93}.

Currently, there is no therapy that can slow down or stop the progression of Parkinson's disease. This also implies that early detection of the disease does not provide better treatment options or better outcomes. Optimal management of Parkinson's disease should start right after the diagnosis to maintain or improve the quality of life of the patient and her/his family as much as possible. It requires a **personalised, multidisciplinary team approach to empower patients and address their comprehensive needs**⁹⁴. In the Netherlands, this approach has been developed as the ParkinsonNet model (see example below), which has achieved full national coverage and has now spread to several other countries⁹⁵.

2.6.1 Possible priority areas

A list of possible areas for action that countries may wish to prioritise for this strand is provided below. Annex 4 describes the priority areas in more detail, including some examples countries may wish to consider for implementation. A more extensive list of actions to consider for implementation is included in Annex 5.

Possible priority areas for mental health:

- Supporting favourable conditions for mental health and increasing resilience; implementing Mental Health in All Policies (1);
- Promoting mental well-being and preventing mental disorders (2);
- Improving timely and equitable access to high quality services (3);
- Protecting rights, enhancing social inclusion, and tackling stigma associated with mental health problems (4).

Countries may wish to further build on the work that is currently being done for mental health, especially as regards the implementation of best practices such as via the Joint Action on Implementation of Best Practices in the Area of Mental Health (JA ImpleMENTAL) or the European Alliance Against Depression-Best project, both of which started in 2021.

For neurological disorders, countries may consider to prioritise actions in the following areas:

- Implementing national plans for stroke: increasing awareness, improving screening and encompassing the entire chain of care, from primary prevention to life after stroke (5-6-7);
- Changing attitudes towards dementia, and tackling stigma associated with dementia (8);
- Prevention and early detection of neurological diseases, in particular Alzheimer's disease and dementia (9);
- Implementing person-centred integrated care models, to better manage neurological disorders and support the quality of life of patients and their families (10).

⁹¹ Bloem BR, Okun MS, Klein C. Parkinson's disease. The Lancet 2021; 397; issue 10291: 2284-2303. Link: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00218-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00218-X/fulltext)

⁹² Simon DK, Tanner CM, Brundin P. Parkinsons disease epidemiology, pathology, genetics and pathophysiology. Clin Geriatr Med 2020 ;36(1): 1-12. Doi :10.1016/j.cger.2019.08.002.

⁹³ Mentis AA, Dardiotis E, Efthymiou V, Chrousos GP. Non-genetic risk and protective factors and biomarkers for neurological disorders: a meta-umbrella systematic review of umbrella reviews. BMC Med. 2021 Jan 13;19(1):6. doi: 10.1186/s12916-020-01873-7. Erratum in: BMC Med. 2021 Nov 9;19(1):297. PMID: 33435977; PMCID: PMC7805241.

⁹⁴ Bloem BR, Okun MS, Klein C. Parkinson's disease. The Lancet 2021; 397; issue 10291: 2284-2303. Link: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00218-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00218-X/fulltext)

⁹⁵ Bloem BR, Okun MS, Klein C. Parkinson's disease. The Lancet 2021; 397; issue 10291: 2284-2303. Link: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)00218-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00218-X/fulltext)

Note that the area of primary prevention is also covered in the first strand on health determinants, addressing many modifiable risk factors of stroke and dementia. Furthermore, the integrated approach covered the topic of health inequalities, which is also an important priority area for stroke and Alzheimer's disease. Continuous monitoring, specific policies at the EU level as well as harmonised data registries in the EU countries, could help to identify and effectively address these inequalities.

2.6.2 EU countries' views

The table below shows the EU countries' views on possible priority areas within the strand on mental health and neurological disorders.

Table 2.6.1. Priority areas indicated by EU countries

Mental health and neurological disorders	Number of EU countries that endorse the priority areas
PRIORITY AREA 1: Supporting favourable conditions for mental health and increasing resilience; implementing mental-health-in-all policies	16
PRIORITY AREA 2: Promoting mental well-being and preventing mental disorders	
Mental health promotion and prevention of mental health problems with a specific focus on young people	15
Strengthening mental health and resilience, raising awareness and tackling stigma associated with mental health problems among the general population	14
Suicide prevention (<i>and reduction of self-harm</i>)	12
Additional suggestions or specifications of countries: • Mental health promotion • Well-being promotion • Stress reduction • Prevention of sleep disorders • Mental health first aid and awareness (MHFA) training	3
Prevention of pathological grief	1
Promoting mental well-being and preventing severe mental health conditions and suicide	3
PRIORITY AREA 3: Improving timely and equitable access to high quality services	10
Service access, coordination and continuity of care	2
Accountability and continuous improvement*	1
PRIORITY AREA 4: Protecting rights, enhancing social inclusion, and tackling stigma associated with mental health problems	
Social inclusion	3
De-stigmatisation, protecting rights and enhancing social inclusion	1
PRIORITY AREAS 5-6-7: Supporting EU countries to develop and implement national plans for stroke encompassing the entire chain of care (5); Improve screening and monitoring of stroke within primary care (6); Increasing awareness of stroke among the general population and vulnerable populations in particular (7)	*
PRIORITY AREA 8: Changing attitudes towards dementia, and tackling stigma associated with dementia	8

PRIORITY AREA 9: Prevention and early detection of neurological diseases, in particular Alzheimer's disease and dementia	10
<i>Prevention and early detection of neurological diseases</i>	2
PRIORITY AREA 10: Implementing person-centred integrated care models, to better manage neurological disorders and support the quality of life of patients and their families	
High-quality care to manage dementia and support the quality of life of people with dementia and their family/carers	10
Actions on neurological diseases other than dementia	6
High-quality care in managing neurological diseases and supporting quality of life	2

* These priority areas were not included in the initial consultation but they will be discussed with country representatives in the SGPP subgroup on NCDs.

2.6.3 Collaborative action

Suggestions for possible work packages on Mental Health and Neurological Disorders (beyond 2022) are provided in the table below.

Table 2.6.2. Collaborative action on **mental health and neurological disorders**

Work Packages		Content
1	Mental Health in All Policies	Developing supportive structures, mechanisms, processes for integrated policies and actions to support mental health, strengthening social inclusion, raising awareness and destigmatising mental health issues among the general population. Learning from examples implemented in other countries, and/or initiate further steps to expand existing mechanisms and approaches, for instance by strengthening cooperation between health and other sectors, joint budgeting/commissioning, or mental health equity impact assessment and monitoring.
2	Well-being and mental resilience for future generations	Encouraging social/life skills and resilience, tackling adverse life events, parental support, mental health literacy, anti-bullying programmes, online safety, preventing and treating eating disorders, mental health in school settings; loneliness; intergenerational support.
3	Investing in mental health promotion at work and in employment opportunities for people with mental health problems	Return-to-work programmes for people with mental health problems; tackling stigma and stereotypes, preventing stress, burn-out and bullying; right to disconnect.
4	Strengthening services in the community (e.g., in primary care/out-patient settings)	Further develop and roll out peer support models; strengthen capacity in primary/community care; increase capacity to meet increased needs; improve access for underserved and minority populations.
5	Mental health support for refugees and displaced persons	Developing centres of expertise to gather and share cultural-sensitive approaches; boosting capacity; eTranslation facilities to support clients and service providers.
6	Continuity of mental health service provision for adolescents	Ensuring seamless and continuity of service provision in transfer from child and adolescent services to adult services, for instance via policy measures, integrated service delivery, and financing models.
7	Improving integrated care and rehab pathways for stroke patients	Improving early response; supporting integrated care pathways; smart devices and other eHealth solutions for patients; return-to-work programmes; self-management programmes.

8	Dementia-friendly communities	Further develop this approach and encourage/support implementation at local level; tackling stigma and supporting population-wide campaigns; supporting people living with dementia to live full and independent lives as much as possible; support programmes for informal carers.
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3. Supporting implementation

In this section, the EU NCD Initiative identifies the various, legal frameworks and financial instruments provided by the EC that can be activated by EU countries to facilitate investments that contribute to reducing the burden and impact of NCDs, and specifically to implement good practices at a wider scale. An overview of such opportunities is given below, with additional detail in Annex 6. A recent report by the European Observatory on Health systems and Policies also provides a comprehensive review on the existing EU support options to reinforce health and healthcare⁹⁶.

3.1. EU4Health

The **EU4Health Programme**⁹⁷, with a total budget of EUR 5.3 billion over seven years, has the overall objectives to improve and foster health in the Union, protect people from serious cross-border health threats, improve access to medicinal products, medical devices and crisis relevant products and strengthen health systems.

The EU4Health Programme is the main financial instrument to fund the Union health initiatives and a minimum of 20% of the Programme's total budget shall be reserved for health promotion and disease prevention actions.

The Programme is implemented through annual work programmes and EU countries are consulted on the priorities and strategic orientations for the work programmes and work together with the European Commission in the EU4Health Steering Group to ensure consistency and complementarity with national health policies. As part of the governance of the EU4Health Programme, stakeholders, including representatives of civil society and patients' associations, academics and organisations of healthcare professionals, provide input on the priorities and needs to be addressed through the annual work programmes.

The 2022 Work Programme supports the EU NCD Initiative with dedicated funding, starting with the strands of cardiovascular diseases and diabetes, and health determinants, in coordination with Europe's Beating Cancer Plan. The Programme also supports the development of digital integrated approaches and capacity-building with bearing on NCDs, such as the implementation at both national and European level of digital health services with the European Health Data Space⁹⁸.

⁹⁶ Fahy N, Mauer N, Panteli D. European support for improving health and care systems. WHO, 2021.

⁹⁷ Regulation (EU) 2021/522 of the European Parliament and of the Council establishing a Programme for the Union's action in the field of health ('EU4Health Programme') for the period 2021-2027, and repealing Regulation (EU) No 282/2014.

⁹⁸ European Health Data Space (europa.eu)

3.2. Main financial support programmes

Next to the options for actions, policies and interventions under the five strands of action to be funded under the EU4Health Programme, there are many other possibilities for EU countries to obtain EU financial support that may positively impact the burden and consequences of NCDs.

These financial instruments are provided by various DGs and are based on underlying strategies that aim at providing social, infrastructural and economic support to EU countries to improve their social and economic systems, develop and improve relevant infrastructures such as healthcare or social systems or improve workplace safety, and combat regional and socio-economic inequalities. In this way, the EC implicitly supports various major elements of a Health-in-All-Policies strategy. The financial support is also intended to counteract the serious negative effects on EU countries' health systems of the COVID-19 crisis. The NCD Initiative points at these options to facilitate a broader, fully integrated approach to combat NCDs by also acting on the wider determinants of health. Here we discuss in some detail a selection of instruments that have substantial budgets as well as several other potentially relevant programmes and funding possibilities. This inventory will overlap and coincide with a similar inventory that has been made for Europe's Beating Cancer Plan.

The Cohesion Policy Funds (ERDF and ESF+)

The Cohesion Policy Funds 2021-2027⁹⁹ ('European Regional Development Fund' – ERDF and 'European Social Fund Plus' – ESF+, with an overall budget of EUR 373 billion) have a number of overarching policy objectives. These funds were previously known as ESI or ESIF funds (European Structural and Investment Funds). These funds allow investments in health and long-term care that may be envisaged mainly under two of the primary policy objectives: namely under PO1 (A smarter Europe) and PO4 (A more social Europe). ERDF and ESF+ can support a wide range of health system and public health policies, and national and regional authorities in countries need to ensure that projects are part of a broader investment strategy and link to reform agenda. The ERDF aims to promote the balanced development of European regions and the ESF+ supports job creation, education, social inclusion and investments in human capital.

Previous ESI funding examples: improving access to care for underprivileged groups or areas

Portugal has received EU funding (2016-2018) for the project 'Proximity mobile health care units'. The project focused on providing mobile primary health care (PHC) services for isolated and ageing population groups in rural Algarve by introducing mobile health care units across the region.

In Belgium, an EU-funded project has been using mobile laboratories for the benefit of patients with chronic diseases, as well as for the healthcare communities that serve them, by reducing the burden of caring for these patients in a hospital setting.

A cross-border project between Greece and Bulgaria via the Interreg A Programme has improved access to primary healthcare in their rural cross-border areas, where the population has difficulty accessing healthcare services. This was achieved with mobile health units staffed by a range of health specialists.

Reference: ESI funds for health. Investing for a healthy and inclusive EU. Final report. 2019. EC, Brussels. DOI: 10.2818/42446.

ERDF and ESF+ can fund operations which aim to improve health systems resilience, accessibility and effectiveness, for instance: development of health infrastructure (including digital), innovation

⁹⁹ Cohesion Policy 2021-2027 - Regional Policy - European Commission (europa.eu)

and efficiency enhancing reforms in health, health promotion, disease prevention, integrated care, health workforce training, digital tools and solutions such as telemedicine, medical products and supplies to strengthen the resilience of health systems. In addition, ESF+ can support measures which enhance access to healthcare for people in imminent socio-economic vulnerabilities. Part of the EUR 373 billion will be used by countries for investments in health according to priorities defined by their national and regional authorities, as well as country-specific recommendations as identified in the European Semester, which will be negotiated with the European Commission. There is still opportunity for discussion about the focus of national plans as not all have been submitted, and this discussion has to be done domestically as national authorities in countries are also responsible for prioritising, programming and implementation of their allocations of Cohesion Policy funds.

Previous ESI funding examples: improving education for selected medical professions

Poland has received funding (EUR 21.6 million) to enhance the specialised education for physicians in key areas of epidemiology and demography and train medical specialties that are linked to the five groups of diseases that are the main causes of economic inactivity in the Polish population.

Bulgaria has received funding (EUR 5.4 million) to reinforce elements of the national health strategy that identified severe shortages in certain types of health professionals and the projects built upon similar successful initiatives funded earlier.

Reference: ESI funds for health. Investing for a healthy and inclusive EU. Final report. EC, Brussels, 2019. DOI: 10.2818/42446.

Previous ESI funding (2014-2020) supporting the reform of health systems

In 16 EU countries there have been investments in health system reform. Major reforms to reduce unwanted institutionalisation and reinforcing primary care have been executed by numerous projects in Poland, Bulgaria and Spain. In addition, investments in healthcare facilities were made. Other major beneficiary EU countries for projects on health system reform were Lithuania, Greece, Czechia, Estonia and Portugal.

Reference: ESI funds for health. Investing for a healthy and inclusive EU. Final report. EC, Brussels, 2019. DOI: 10.2818/42446.

The Structural Reform Support Programme (SRSP) and Technical Support Instrument (TSI)

The Structural Reform Support Programme and its successor, the Technical Support Instrument¹⁰⁰, aim to establish and strengthen the capacity of EU countries to prepare and implement growth-sustaining institutional, administrative and structural reforms, coordinated by DG Reform. Labour market, health and social services are under the reform areas covered.

Support for health promotion, disease prevention and cancer screening

Latvia received support for a project to improve cancer screening and registries and work towards a comprehensive cancer network and centre. Support for the research of a comprehensive cancer network and centre was provided within the framework of the SRSS, RRF funding was provided for the establishment of a cancer centre in accordance with the OECD guidelines.

¹⁰⁰ Technical Support Instrument (TSI) | European Commission (europa.eu)

Spain was supported (2019-2021) to improve public health actions through better information on equity and social determinants of health and by finding improved tools for evaluating health promoting interventions.

Croatia received TSI support for the national project: Digitalisation of healthcare: development of the Croatian e-Health Strategic Development Plan 2020-2027 and Action Plan 2021-2022.

The Digital Europe Programme and Connecting Europe Facility

The Digital Europe Programme¹⁰¹ has an overall budget of EUR 7.5 billion to shape and support the digital transformation of Europe's society and economy. It will support, for example, work in technologies for artificial intelligence, supercomputing and cybersecurity; investing in building Europeans' digital skills; and in developing very high-capacity digital networks and joining forces against cyberattacks. It can also be applied to support the development, capacity-building and use of digital technologies in areas of public interest, including health.

NB: The 'Digital strand' of the Connecting Europe Facility¹⁰² has a budget of EUR 2 billion which will finance digital connectivity infrastructure to support high-capacity digital networks and infrastructure of common European interest, e.g., in ensuring that socio-economic drivers such as schools and hospitals have access to future-oriented technology.

One element in this programme is a Testing and Experimentation Facility for Health (TEF)¹⁰³ aiming to foster state-of-the-art artificial intelligence and robotics technologies in the healthcare domain by boosting the European healthcare industry.

REACT-EU

REACT-EU¹⁰⁴ is one of the largest packages under NextGenerationEU, with a budget of EUR 50.6 billion. It aims to continue and extend the crisis response and repair measures delivered through the Coronavirus Response Investment Initiatives, as a top-up to the 2014-2020 European Regional Development Fund and European Social Fund allocations, which can be used until the end of 2023. Part of the EUR 50.6 billion, in the form of grants, can support regional and national health authorities in countries to increase the response capacity of their health systems (e.g., in hospitals and primary care), and to purchase critical medical products and supplies (e.g., vaccines, medicines, medical and protective equipment, medical devices) necessary to strengthen the resilience of health systems. REACT-EU has as new thematic objective "fostering crisis repair in the context of the COVID-19 pandemic and preparing a green, digital and resilient recovery of the economy". Investments as part of the European Regional Development Fund (ERDF) are primarily for a) product and services for health services and working capital or investment support to SMEs, b) investments in transition towards a digital and green economy, and c) investments in infrastructure providing basic services to citizens, or economic measures in the most affected regions and sectors. In addition, investments under the European Social Fund (ESF) are primarily for job maintenance and job creation, youth employment measures, skills development, and – most relevant in this context – enhancing access to social services of general interest (including for children).

The InvestEU Programme

¹⁰¹ Shaping Europe's digital future | Shaping Europe's digital future (europa.eu)

¹⁰² Connecting Europe Facility | Innovation and Networks Executive Agency (europa.eu)

¹⁰³ Testing and Experimentation Facilities under the Digital Europe Programme | Shaping Europe's digital future (europa.eu)

¹⁰⁴ REACT-EU - Regional Policy - European Commission (europa.eu)

The InvestEU Programme¹⁰⁵ is intended to mobilise public and private investment using a budgetary guarantee and resources from the EU budget. The InvestEU Fund (guarantee) of EUR 26.2 billion is expected to mobilise more than EUR 372 billion of additional investment in various economic sectors, including in health. Under InvestEU, national and regional authorities need to work with the InvestEU Implementing Partners (such as the European Investment Bank, some national promotional banks) to configure projects that can attract co-investments from the private sector. Through its Implementing Partners, InvestEU will offer loans and other types of financing for investments in health, for example: in hospital facilities; primary care facilities; eHealth; innovative health services and care models; as well as in the research, development and manufacturing of pharmaceuticals, vaccines and medical devices. The InvestEU Programme also includes the InvestEU Advisory Hub which provides financial advice to project promoters seeking financing, and the InvestEU Portal which aims to bring together project promoters and investors.

Horizon Europe

Horizon Europe¹⁰⁶ is the EU's key funding programme for research and innovation with a budget of EUR 95.5 billion. It tackles among others climate change, helps to achieve the UN's Sustainable Development Goals and boosts the EU's competitiveness and growth.

The Programme facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges. It supports creating and better dispersing of excellent knowledge and technologies.

The aims of the health cluster of Horizon Europe (with a budget of EUR 8.2 billion) include improving and protecting the health and well-being of citizens of all ages by generating new knowledge, developing innovative solutions and integrating where relevant a gender perspective to prevent, diagnose, monitor, treat and cure diseases. Further aims include developing health technologies, mitigating health risks, protecting populations and promoting good health and well-being in general and at work.

Of special interest is the European partnership on Transforming Health and Care Systems (THCS) which aims to boost the research, uptake and scale-up of innovative solutions to accelerate the transformation of national and regional health care systems. A number of specific objectives have been formulated:

- Providing evidence for innovative solutions that support cost-effective and fiscally sustainable health care policies;
- Building a knowledge base for innovative solutions that can be scaled-up and transferred across and within EU countries;
- Developing and testing mechanisms to support diffusion of innovative healthcare solutions;
- Establishing a research and innovation platform that brings together different actors and collects health system data to enable data-driven policy-making.

Finally, this cluster also aims to make public health systems more cost-effective, equitable and sustainable, prevent and tackle poverty-related diseases and support and enable patients' participation and self-management.

In the Horizon cluster, focusing on the Farm to Fork Strategy¹⁰⁷, there is a research area that focuses on integrated surveillance systems to prevent and reduce diet-related NCDs and an area that deals with trustworthy artificial intelligence tools to predict the risk of chronic NCDs and/or their progression.

¹⁰⁵ Home (europa.eu)

¹⁰⁶ Horizon Europe | European Commission (europa.eu)

¹⁰⁷ Farm to Fork Strategy (europa.eu)

The Recovery and Resilience Facility (RRF)

The Recovery and Resilience Facility (RRF)¹⁰⁸ is an investment facility and the centrepiece of the NextGenerationEU recovery instrument. The RRF provides EUR 723.8 billion (in current prices: EUR 338 billion in grants and EUR 385.8 billion in loans) to support reforms and investments undertaken by countries. The aim is to mitigate the economic and social impact of the COVID-19 pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions, including strengthening the resilience of health systems. The RRF is a multi-year programme that runs until 2026. It supports reforms and investments in EU countries to address country-specific recommendations identified in the 2019-2020 European Semesters. To date, the European Commission has adopted positive assessments of 25 national Recovery and Resilience Plans (RRPs) and 24 plans have also been adopted by the Council.

All of these 24 national plans include measures related to healthcare. The total expenditure on healthcare-related measures amounts to approximately EUR 38 billion, which corresponds to 8% of the plans' total expenditure. The measures included in the plans contribute to a variety of health objectives, such as the improvement of primary healthcare, the transition from hospital care to outpatient care, the reorganisation of hospital networks, the upscaling of prevention (including treatment of cancer patients), improvements in the quality of diagnosing and treating patients, the strengthening of the healthcare workforce and the modernisation of healthcare facilities. In particular, ca. EUR 15 billion in investments in the RRP include primary care or prevention. These investments aim at increasing the allocation for primary care in rural areas and opening of new primary care outpatient clinics in deprived areas, introducing mobile pharmacies offering primary care services, and strengthening the role of general practitioners in primary care. Countries plan to adopt and implement an ambitious reform agenda to complement investments in the healthcare sector. This agenda features reforms to strengthen the resilience of the health sector and increase the availability of integrated and high-quality healthcare services. Health reforms are also geared towards improving access to healthcare: some RRP envisage to adopt national public health programmes to support primary, secondary and tertiary prevention. In particular, reforms focus on setting up and rolling out national preventive screening programmes, promoting psychosocial integration and improving palliative care.

Related EU actions and activities

In the description of the strands attention has already been given to various EU programmes and strategies that in a direct or indirect way have an input on the NCDs in question and their determinants. The importance of Europe's Beating Cancer Plan is repeatedly referred to in this regard as well as at the EU Public Health Best Practice Portal¹⁰⁹. Without aiming to be complete we like to mention some other EU actions that were not discussed before but have relevance for the Initiative. EU Public Procurement tools including cross-border joint public tenders, the Climate and Health Adaptation strategy and the EU strategy on the rights of the child could be of relevance. In the "EU Strategic Framework on Health and Safety at Work 2021-2027 – Occupational safety and health in a changing world of work"¹¹⁰, the European Commission announces that in the area of occupational circulatory diseases, further research and data collection should be initiated as well as health promotion at work, both at EU and national level. In addition, there will be attention for workers' mental health also focusing on healthcare workers. With the Health Promotion and

¹⁰⁸ Recovery and Resilience Facility | European Commission (europa.eu)

¹⁰⁹ pb-portal (europa.eu)

¹¹⁰ EU Strategic Framework on Health and Safety at Work 2021-2027 | Safety and health at work EU-OSHA (europa.eu)

Disease Prevention Knowledge Gateway¹¹¹, the European Commission aims to increase the accessibility of policy relevant information.

The new Urban Mobility Framework aims to create healthier and safer mobility and to support active mobility modes, such as walking and cycling, and reduce the impact of environmental factors on respiratory diseases. Support for actions in this area will be available from the aforebefore financing instruments.

Actions under the Zero Pollution Action Plan (ZPAP)¹¹² aim, among others, to contribute to reducing health inequalities through working towards zero pollution and aiming at better cardiovascular, respiratory and mental health, next to focusing on cancer. In this area, the EC has implemented the European Climate and Health Observatory¹¹³.

The European Commission has also launched a large two-year campaign, HealthyLifestyle4All, that aims to link sport and active lifestyles with health, food and other policies. As a follow-up to the Tartu Call for a Healthy Lifestyle, the HealthyLifestyle4All¹¹⁴ is the European Commission's two-year campaign that aims to link sport and active lifestyles with health, food and other policies. It showcases the European Commission's commitment to promoting healthy lifestyles for all, across generations and social groups, noting that everyone can benefit from activities that improve health and well-being. This Initiative is open to institutions and organisations willing to contribute to society by promoting healthy lifestyles. Civil society and sport organisations, national, local and regional authorities and international bodies have the opportunity to come up with their activities, by presenting them as a pledge on the virtual Pledge Board on the European Commission's website.

In addition to a number of projects and joint actions that are mentioned in the chapter on the five strands, there are a number of projects currently or previously funded by the European Commission that bear relevance to the five strands discussed in this Initiative. It goes beyond the purpose of this document to mention all of them and end up by still leaving some out unjustifiably.

For a more detailed overview of EU actions and instruments for health outside the larger funding programmes discussed above, we refer the reader to Annex 6 and to the previously mentioned report by the WHO Observatory on Health Systems and Policies¹¹⁵.

¹¹¹ Health Promotion Knowledge Gateway (europa.eu)

¹¹² https://ec.europa.eu/environment/strategy/zero-pollution-action-plan_en

¹¹³ European Climate and Health Observatory (europa.eu)

¹¹⁴ The HealthyLifestyle4All Initiative | Sport (europa.eu)

¹¹⁵ Fahy N, Mauer N, Panteli D. European support for improving health and care systems. Policy Brief 43. WHO, 2021.

4. Closing Remarks

This document, resulting from the co-creation work of the European Commission with EU countries and health stakeholders, points at areas, policies and interventions that can support ambitious action to reduce the burden of NCDs.

This is an 'open document', as the European Commission intends to update and complement it regularly with additional references, including, where available, on effectiveness, cost-effectiveness and successful national experiences. Future versions of this document will be enhanced by making use of previous and ongoing efforts by international organisations (e.g., the WHO, the OECD), by expert networks (e.g., the Cochrane collaboration), by EU-supported activities (projects, Joint Actions with EU countries, work by the JRC) as well as by national institutes and by the existing body of international research in compiling the evidence for effective policies, actions and interventions and evaluating the best ways to implement these.

The aim is to assist countries in making their preferred choices and in the implementation process. EU countries may also take inspiration from this tool to implement some actions at their national level, with their own funding.

Additional meetings of expert groups may be organised to further support this process, i.e., fine-tuning the priorities and actions and keep track of the progress of the Initiative, including measuring its impact.

Annex 1 – Overview of consultation meetings and of the process of input collection

Table 1. Calendar of consultation meetings

Date	Event	Number of countries or participants attending the webinar
15 December 2021	SGPP subgroup webinar	22 countries
15 December 2021	Stakeholder webinar	120 participants
28 January 2022	SGPP subgroup webinar	19 countries
3 February 2022	Stakeholders webinar	200 participants
3 March 2022	SGPP subgroup webinar	23 countries
17 March 2022	Stakeholders webinar	142 participants
8 April 2022	SGPP subgroup webinar	20 countries
27 April 2022	Stakeholders webinar	138 participants
19 May 2022	SGPP subgroup webinar (joint meeting with the SGPP subgroup on cancer)	25 countries
3 June 2022	Stakeholders webinar (joint meeting with SGPP subgroup)	89 participants
22 June 2022	Launch event	Forthcoming

Figure 1. Collection of inputs from EU countries' authorities and stakeholders

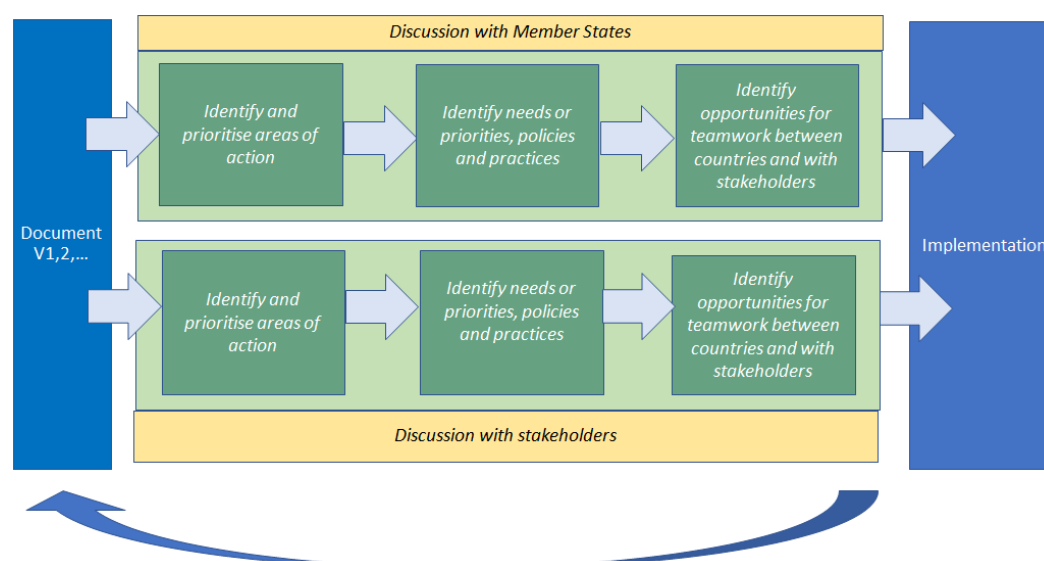


Table 2. Overview of the stakeholders that provided input in writing to the EU NCD Initiative

Name of the stakeholder organisation
Association Internationale de la Mualité (AIM)
Associazione italiana scompensati cardiaci associazione di promozione sociale (AISC)
AstraZeneca
CardioAlianza
Centre for Innovation in Medicine
EuroHealthNet
European Alcohol Policy Alliance
European Alliance for Cardiovascular Health
European Association for Palliative Care
European Association for the Study of Obesity
European Association for the Study of the Liver (EASL)
European Association of Nuclear Medicine & European Committee for Homeopathy (ECH)
European Association of Urology
European Brain Council (EBC)
European Chronic Disease Alliance (ECDA)
European Diabetes Forum
European Federation of Allergy and Airways Diseases Patients' Associations (EFA)
European Federation of Neurological Associations (EFNA)
European Federation of Pharmaceutical Industries & Associations (EFPIA)
European Federation of Pharmaceutical Industries & Associations (EFPIA) – CVD Network
European Federation of Pharmaceutical Industries & Associations (EFPIA) – Diabetes Platform
European Heart Network (updated)
European Kidney Health Alliance
European Lung Foundation
European Migraine and Headache Alliance (EMHA)
European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
European Parkinson's Disease Association
European Public Health Alliance (EPHA)
European Respiratory Society
European Society of Cardiology and its Advocacy Chair
European Society of Hypertension
European Thrombosis and Haemostasis Alliance
FOKUS Patient®
GAMIAN-Europe
Global Heart Hub, The International Alliance of Heart Patient Organisations
Health First Europe
Hearing Health Forum EU
Heart Failure Policy Network
International Diabetes Federation (IDF) Europe
International Society for Pediatric, Adolescent and Young Adult Diabetes (ISPAD)
International Sport and Culture Association (ISCA)
Medical Nutrition International Industry (MNI)
MedTech Europe's Cardiovascular Sector Group
MedTech Europe's Diabetes Sector Group
Mental Health Europe (MHE)
Novartis
Platform for Better Oral Health in Europe
PricewaterhouseCoopers AG (PwC Switzerland)
Psychedelic Access and Research European Alliance (PAREA)
Regional Health Agency – Marche Region
Safe Food Advocacy Europe A.S.B.L. (SAFE)
Stroke Alliance for Europe and the European Stroke Organisation
The European Alliance of Associations for Rheumatology (EULAR)
The Heart Failure Policy Network
The HeartBeat Trust
The Patient's Voice

The Structural Heart Disease Coalition
Uniting European organisations in the sector of Traditional, Complementary and Integrative Medicine (EUROCAM)
World Sleep Society; Assirem Ets. Associazione Italiana per la Ricerca e l'Educazione nella Medicina del Sonno (Italy); Oasi Research Institute, Troina (Italy)

* It should be noted that additional contributions from stakeholders may have been received which will be considered in the further development of actions.

Annex 2 – Contributions by EU countries and stakeholders

By participating in several webinars and providing written comments, a large group of stakeholder organisations provided valuable ideas, suggestions and examples of good practices to better and more effectively combat NCDs, with particular focus on those that are addressed in this Initiative. In parallel, EU countries also participated in the process at different moments in several committee and had the opportunity to identify their priorities and suggest best practices and thus also contributed significantly to the content of this document.

These contributions by EU countries and stakeholders were extremely valuable. This Annex provides a high-level summary of inputs, given that it was not possible to cite or mention the contributions of each and every stakeholder or EU country in the text of the various strands and in the collections of best practice. While all inputs were considered, it was also not possible to include all contributions for reasons related to relevance, focus, clarity or specificity, among others.

Many of the inputs aimed at improving the effectiveness of prevention, the quality and patient-centeredness of care, and at pointing to the need to strengthen self-management capacities of chronic disease patients and to address stigmatisation of those suffering in other ways from NCDs. They also addressed the need to occasionally implement gender tailoring and culturally sensitive actions and referred to the more general need to strengthen the prevention workforce. They pointed at options to use financial incentives or disincentives to support healthy behaviour and to regulate unhealthy elements of product marketing targeted at our youth.

The needs and benefits of developing national programmes, strategies or action plans including advocacy and information campaigns and setting targets to combat NCDs were regularly mentioned by both stakeholders and EU countries. Stakeholders pointed at the potential of involving patients and citizens more intensely in the policy development processes.

Some other chronic disease entities were identified by stakeholders as important, such as fatty liver disease, chronic kidney failure and oral health problems which could be related to the selected NCDs and could benefit from actions under the Initiative. Under the heading of neurological disorders, there are also many relevant specific diseases due to their burden and chronicity for individual patients. Not all could be included in the Initiative, but some elements may be addressed by EU countries and partners in future collaborative actions. In relation to these and other diseases, various research needs and priorities were also proposed that were often of a more fundamental nature and therefore lie beyond the action-oriented scope of this initiative, but may well find support from the Horizon Europe Programme.

Other overarching priorities that were repeatedly mentioned by many stakeholders and several EU countries were the general need for a more integrated approach to the prevention and care of NCDs, the need to address multimorbidity and to strengthen primary care systems where needed. Several mentions were also made of the potential benefit of developing better and/or international guidelines for specific types of disease management.

Various other suggestions were part of a larger and overarching priority, i.e., the need for an integrated health literacy approach, including sufficient education, that will guarantee the availability and access to reliable and trusted information on health and care and the need to combat 'fake news' and the emerging 'infodemic'. At the same time there is a need to improve, harmonise and open up our health data, e-health and ICT-systems for multiple use, by patients, clinicians, researchers and policy makers.

Stakeholders also repeatedly pointed at measures, programmes, strategies and actions suggested by international organisations such as the WHO and the OECD, many elements of which were incorporated into this document. Some stakeholders also pointed at the need to look for good practices and examples from outside the European Union and at the importance of international collaboration in research, exchange of best practice and capacity building.

Besides suggestions that are part of this Initiative, some stakeholders suggested additional activities that may be undertaken by the European Commission which may improve the overall

effectiveness and sustainability of actions to combat NCDs in the European Union. Most of these would require actions of EU countries and stakeholders beyond this Initiative but could certainly contribute to the general aims and goals of this Initiative.

Other recommendations that fall within this Initiative and that had already been put in practice in some EU countries or regions, are the development of national dedicated legal instruments to support healthy behaviour and of paying sufficient attention to health in other policies, including health protection measures that aim to combat environmental hazards and to focus more at social and economic measures to address health inequalities and relieve the burden of mental health problems. EU countries also provided examples of how they already had made use of the various financial instruments made available by the European Commission to support health-related policies and actions, as presented in Annex 6.

Annex 3 – Non-communicable diseases burden and risk factors

Non-communicable diseases (NCDs) are diseases that are often of a combination of genetic, physiological, environmental and behavioural factors¹¹⁶. More than a third of all people aged 16 years and older living in the EU-27 has at least one long-standing self-reported illness or health problem (2019)¹¹⁷; higher estimates of NCD prevalence have been found using other definitions and assessment methods. Because of population ageing, unhealthy lifestyle and better medical treatments reducing the mortality of NCDs, it is expected that this proportion will further increase. Therefore, it is essential to promote healthy ageing and prevent frailty and ageism. Furthermore, multimorbidity is on the rise. Managing multimorbidity has become a major additional challenge for European health systems and societies as both the diseases and the treatment may interfere with each other, thus complicating disease management and patient care.

The burden of NCDs

The major types of NCDs are cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, and mental disorders¹¹⁸. These conditions account for an estimated 86% of all deaths in the WHO European region¹¹⁹. Given that cancer is responsible for about 20% of all deaths¹²⁰, still two thirds of all deaths in the European region result from cardiovascular diseases, diabetes, chronic respiratory diseases, and mental disorders. Within the EU, cardiovascular diseases are the leading cause of death (37% of all deaths in 2017), followed by cancer (26%) and chronic respiratory diseases (8%) (Figure A1). Dementia because of Alzheimer's disease or other causes accounted for 5% of all deaths in 2017, and diabetes for 2%. Suicide (1% of all deaths in 2017) is the most frequent cause of violent deaths¹²¹.

¹¹⁶ <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

¹¹⁷ Statistics | Eurostat (europa.eu)

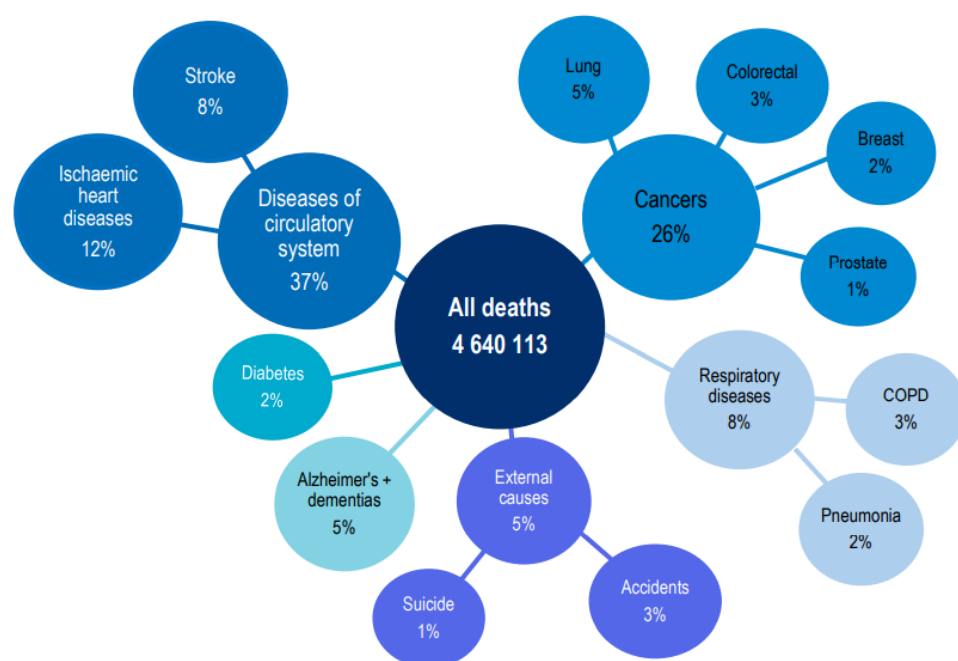
¹¹⁸ <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

¹¹⁹ WHO/Europe | Non-communicable diseases

¹²⁰ <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/cancer/cancer>

¹²¹ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

Figure A1. Main causes of deaths within the EU



Source: Health at a Glance Europe 2020, OECD/European Commission; data from Eurostat (2017; except for France: 2016)

The causes of death have been evolving diversely, and with different time trends, thus impacting EU countries and requiring appropriate reaction from health systems. The main causes of death vary between gender and socioeconomic groups, which is reflected in large inequalities in life expectancy. Life expectancy is particularly lower for men of working age with a low education level, as a result of the much higher mortality rates from all the main causes of death¹²². Significant health inequalities also exist between countries. While the overall mortality rate in the EU-27 was 1007 per 100 000 persons in 2017, more than 40% higher (age-standardised) mortality rates were found in Bulgaria, Hungary, Latvia, Lithuania, and Romania. The main reason for the much higher mortality rates in these countries is the higher mortality from cardiovascular diseases. In Hungary, higher mortality rates from cancer also contribute to the difference from the EU average¹²².

NCDs are also responsible for 77% of the disease burden in the European region¹²³. They cause substantial human suffering and threaten the financial position of households, which reduces participation opportunities for all household members, including children. Moreover, the societal costs of NCDs are huge and expected to grow further, also considering the EU's ageing population. NCDs account for the largest part of countries' healthcare expenditures, costing EU economies EUR 115 billion, or 0.8% of GDP, annually¹²⁴. NCDs also entail other societal costs, such as loss of productivity, loss of workforce, loss of informal care, costs of social insurance and social care. This is particularly marked in the case of mental health problems, where only a third of the total (EUR 600 billion) costs related to mental ill-health reflect direct spending on health care¹²⁵.

¹²² OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

¹²³ WHO/Europe | Noncommunicable diseases

¹²⁴ OECD/EU (2016), Health at a Glance: Europe 2016 – State of Health in the EU Cycle, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264265592-en>

¹²⁵ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en (based on data from 2015)

Impact of COVID-19 on NCD prevention and management

Since the outbreak of the COVID-19 pandemic, the challenge for countries to effectively prevent and manage NCDs has become even bigger. The past year has shown that people suffering from NCDs run a higher risk of being affected by COVID-19 and run a higher risk of complications and dying from COVID-19. At the same time, (early) diagnosis and treatment of NCDs was forcibly postponed.

COVID-19 has not only disproportionately impacted people living with NCDs, but also those at risk of NCDs, among others by rises in unhealthy behaviours (such as malnutrition and lack of physical activity) as well as significant increases in the burden of mental illness of our populations and especially among young and disadvantaged groups. As a result, the pandemic further magnified persistent inequalities in health outcomes and health determinants, both within and across countries. Disease prevention and health promotion activities, and care services, have been put on hold exactly when people's lifestyles and mental health deteriorated. A situation that was already serious has thus become even more challenging.

The COVID-19 pandemic has also revealed the fragility of overstretched health care systems. As noted in a recent report by the World Health Organisation on the prevention and control of NCDs, this also implies that 'meeting the objectives and targets of the NCD-GAP and SDG target 3.4 in a post-COVID-19 world requires a concerted response and integration of the NCD agenda into existing global and national efforts to rebuild resilient health systems'¹²⁶. While this can cover a wide range of areas, one that is particularly harmful for the introduction of many forms of innovation in the area of prevention and its linkage with health care provision (e.g., in primary and community care settings) is the widely shared shortage of qualified health workers.

Potentially, the COVID-19 pandemic can provide opportunities to reduce the burden of NCDs and build back better. One opportunity is that COVID-19 has made the area of health much more prominent in the minds of citizens, which may create momentum for a shift to more healthy living and for taking an active role as citizens, which is critical in the area of prevention and early detection. Additionally, COVID-19 created greater awareness, including among decision makers outside the health field, of the need to provide reliable and evidence-based information about public health risks and opportunities across all channels. Thirdly, the COVID-19 crisis led to the accelerated introduction of some new technologies by both national authorities and citizens. For instance, there has been a significant rise in the use of telemedicine in healthcare settings and this may also benefit the prevention and treatment of NCDs.

¹²⁶ https://apps.who.int/gb/ebwha/pdf_files/EB150/B150_7-en.pdf

Annex 4 – Priority areas

This annex provides more information on the priority areas suggested in the body of the document, for the integrated approach and for each strand.

Integrated approach

Integrated approach area 1: Reducing health inequalities by addressing social determinants, health literacy and digital literacy

There are substantial health inequalities within and across EU countries, in part based on social determinants, such as socio-economic position, age, gender, income, education and social support. These underlying factors beyond individual control can accumulate along one's life-course and affect their health behaviours and choices¹²⁷. For example, obesity and overweight rates are about twice as high in children living in the lowest income families compared to those living in the highest income families. Also, exposure to risk factors such as air pollution, tobacco use and alcohol use is less favourable for those living in lower income households^{128,129}. Social determinants strongly impact individuals' health behaviours. As such, people living in deprived areas have been found to be four times more likely to die from avoidable causes than those living in more affluent neighbourhoods. Poverty can result in lower school performance and lower productivity at work, further deepening existing problems. Therefore, comprehensive policies are needed to reduce poverty, increase the education level of citizens, provide safe water and clean air, promote good working conditions and healthy workplaces, support access to prevention and healthcare, and to reduce availability and exposure to marketing of health-harming products, including alcohol and tobacco.

Effectively **addressing social determinants involves a multifaceted approach**, working on strengthening protective factors and reducing risk factors. This requires long-term investment to create and ensure safe and healthy living and working environments, good housing, access to healthy food and clean water, and income protection for families dealing with unemployment, occupational disability or high costs due to illness or disability, such as co-payments for medical care or nursing, expenditure for medical or support aids, house adaptations, etc. Moreover, (life-long) **education is a key factor to tackle social determinants**, which may require countries to improve financial access for less wealthy families to educational facilities, but also to raise awareness of social inequalities at schools and training institutes. Health in All Policies are needed to ensure a multifaceted approach.

Good quality data and evidence are important to identify health inequalities and the affected groups, to demonstrate the impact of social and economic conditions on health, a social gradient therein, and to co-create solutions with the affected populations. This requires Health Inequalities Information Monitoring Systems (HIMS) to be put in place, aligned across governance levels within as well as between countries, establishing structures and mechanisms that encourage, enable and reward collaboration across sectors. National statistical services must, in collaboration with the relevant entities, have the capacity to develop, collect and analyse the data, to measure health impacts of policies and initiatives, and to communicate on and apply this information to the broader public and in policy making arenas. Correlating health data with social, economic, and

¹²⁷ Analysis on Social determinants and non-communicable diseases: time for integrated action: <https://www.bmj.com/content/364/bmj.l251>

¹²⁸ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

¹²⁹ <https://www.euro.who.int/en/health-topics/disease-prevention/alcohol-use/publications/2021/making-the-european-region-safer-developments-in-alcohol-control-policies,-20102019-2021>

environmental data, and strengthening the equity elements of existing health monitoring systems will support development of evidence-based and targeted policies and interventions for improved health equity. Since existing structures and capacities to measure and act on the social determinants of health, and their distributional impacts, vary greatly across countries in Europe, there is not a 'one size fits all' approach to enable all countries to build HIMS and governance for health approaches. The focus should rather be on encouraging and enabling the relevant professionals to learn from one another as was done in the Joint Action Health Equity Europe (JAHEE) (2019-2021).

Structures and mechanisms that facilitate collaboration between different sectors ('Health-in-All-Policies' or 'governance for health' approaches) are also crucial to act on this information. The EuroHealthNet Policy Précis on using (integrated) health and social data to monitor health inequalities provides several pathways for progress at EU level and drawing on good examples¹³⁰. Local authorities and municipalities and community consortia/citizens panels can be regarded as 'umbrella settings for health' since they have direct access to local populations and environments such as schools and care centres, retailers, public procurers and entrepreneurs, public spaces and safety carers, neighbourhood groups, and workplaces, and provide (basic) services of general interest. In this regard, local authorities can influence many of the underlying social, environmental, and economic determinants of health (SEEDs) that affect people's lives and health (e.g., community engagement, social services provision, transport, provision and quality of green space, cultural or sporting activities).

To **reduce social inequalities, promote inclusiveness and the rights** of all EU citizens, the European Pillars of Social Rights¹³¹ (twenty principles) have been formulated. For each principle, the European Commission has presented several actions; furthermore, it has set out concrete initiatives to deliver on the pillars with the European Pillars of Social Rights Action Plan¹³². This action plan includes a number of EU level actions, complementary to national-level actions, and three EU-level targets to help steer national policies and reforms, in particular on education and labour participation: 1. at least 78% of the EU population aged 20 to 64 should be employed by 2030; 2. at least 60% of all adults should participate in training each year; and 3. the number of people at risk of poverty or social exclusion should be reduced by at least 15 million in 2030. Vulnerable groups for poverty and/or social exclusion include homeless people, ethnic minorities, people living with disabilities, persons from the LGBTI community.

Within healthcare, increasing awareness of social inequalities among care professionals is important, to help them identify and recognise social determinants in individuals and families with – or at high risk of developing – NCDs, and refer to available resources and support services. Providing integrated care and support, in collaboration with local social and community services, is essential, as health and social needs are often intertwined. Countries may check the health equity resource database at the Health Inequalities Portal (<https://health-inequalities.eu/toolbox/jwddb/>) to find policies, good practices, research outputs and initiatives that address health inequalities; the portal also provides an overview of EU funding options for developing and implementing actions to reduce health inequalities: <https://health-inequalities.eu/financing-services-that-promote-health-and-wellbeing/eu-funding/>

Example: Healthy Overvecht Utrecht (The Netherlands)

¹³⁰ https://eurohealthnet.eu/wp-content/uploads/documents/2018/180302_PolicyPrecis_UsingHealthSocialDataMonitorHealthInequalities_WebLayout.pdf

¹³¹ https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

¹³² <https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en/>

Overvecht is a neighbourhood in the city of Utrecht where relatively less wealthy citizens live who have both health and social issues. Healthy Overvecht is an intersectoral integrated care approach to improve the health and lives of people living in this neighbourhood. Characteristics of the integrated care model are:

- Robust and integrated basic social and medical care oriented towards prevention, focusing proactively on the 15-20% of the population with elevated health risks and/or high healthcare costs.
- The 4-Domain model has been designed by general practitioners in consultation with professionals from other disciplines. The model is used for communication and analysis by professionals in the medical and social fields. The model enables GPs to work together with a patient and allows them to understand what is going on in different areas of a patient's life and how this influences the patients' perception of health. The model is also used as a tool for a common language for cooperating, for risk assessment, and for addressing physical, mental, social and societal issues with the patient or client.
- Good ICT and good data management support the care model, facilitate identification of high-need patients or clients, proactive management and intersectoral collaboration. It provides information and communication tools for patients.
- Healthcare professionals have direct lines of communication with social workers and exercise coaches ('wellbeing by prescription'). Patients are encouraged to contact social workers to find facilities for physical activity and social activities in their neighbourhood.

Source : Health inequalities portal: <https://health-inequalities.eu/> (EuroHealthNet)

Besides social determinants, health literacy and digital literacy are important to explain and address health inequalities. **Health literacy** is a person's ability to access, understand, appraise and use health-related information. Limited health literacy is related to poorer health related outcomes, such as a lower receipt of screening and vaccination, more difficulty to self-manage conditions (e.g., to take medications appropriately), more difficulty to interpret labels and health messages, and – among older persons – a poorer overall health status and higher mortality rates¹³³. The proportion of citizens facing difficulties because of limited health literacy ranges between 8% and 43% in European countries¹³⁴.

Digital literacy is associated with the skills that enable the use of information available to citizens: the ability to access, analyse, organise, produce and disseminate information using the available technologies¹³⁵. The proportion of citizens who have at least basic digital skills varies widely across EU countries, with the lowest rates found in 2019 in Bulgaria (29%) and Romania (31%), and the highest (>70%) in Finland, the Netherlands and Sweden (Member States), and Iceland and Norway¹³⁶.

To respond adequately to public health challenges and engage in self-management of NCDs, improving citizens' and patients' health and digital literacy is important. To help countries steer their policies on digital literacy, the EU has set a target, as part of the above-mentioned European Pillars of Social Rights Action Plan: at least 80% of those aged 16 to 74 living in EU countries should have at least basic digital skills by 2030¹³⁷. At the same time, countries should ensure that

¹³³ Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011 Jul 19;155(2):97-107. doi: 10.7326/0003-4819-155-2-201107190-00005. PMID: 21768583.

¹³⁴ The HLS19 Consortium of the WHO Action Network M-POHL (2021): International Report on the Methodology, Results, and Recommendations of the European Health Literacy Population Survey 2019-2021 (HLS19) of M-POHL. Austrian National Public Health Institute, Vienna.

¹³⁵ Couto MJ, Lucas C, Brites M-J, et al. Digital literacy in Europe: Best practices in six European countries. July, 2018. DOI:10.21125/edulearn.2018.0913

¹³⁶ Eurostat - Data Explorer ([europa.eu](https://ec.europa.eu/eurostat))

¹³⁷ <https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en/>

health information is easily accessible and understandable for all citizens. This requires careful attention to the readability and content of health messages as well as to the communication channels that are being used to reach citizens with various levels of health and digital literacy. It may also require health information to be available in languages spoken by (large) minority groups or setting up help desks within local communities or online. Specific groups of citizens that are hard to reach through traditional communication channels may be **reached by innovative approaches involving representatives of the target population** in designing the health message or behavioural intervention and then reaching out.

Moreover, countries have the responsibility to **facilitate access to high-quality of care for all citizens**, and to ensure that healthcare and support is provided that meet the needs, preferences and competencies of all citizens and patients, including those with limited health or digital literacy. Strategies to improve the quality of care for patients with limited health or digital literacy may focus on **raising awareness** of health and digital literacy issues among healthcare professionals, ensure these topics are addressed in relation to attitude and communication skills of (future) healthcare professionals in basic **medical and nursing training** and in accreditation programmes, provide tools to healthcare professionals to assess patients' health literacy and support communication, and set up community services to help people with limited health or digital skills.

Integrated approach area 2: Digital tools to support health promotion, disease prevention and management

Taking account of the various levels of health literacy and digital literacy of citizens in countries, digital tools can bring benefits for large groups of citizens, as health information and self-monitoring of health risks and NCDs could be tailored to their needs, preferences and literacy level. Furthermore, implementing digital tools to support patients or healthcare professionals may contribute to reduce unmet needs, facilitate shared decision-making and patients' self-management of NCDs, and improve the quality of care through providing easy access to up-to-date evidence-based guidelines and consulting specialists through remote access services. Making use of the full potential of digital solutions within the health system as a whole can contribute to reducing health inequalities, for instance, by providing care in the most remote areas, and by facilitating the provision of person-centred integrated care, while also increasing efficiency of care delivery.

Example: ETAPES

ETAPES is a public health initiative from the French authorities to pilot the use of remote monitoring (telemedicine) solutions. The programme focuses on the implementation of remote monitoring solutions for several chronic conditions, including diabetes, heart failure, chronic kidney disease and chronic respiratory disease. For each of these conditions, healthcare professionals can choose among several apps for remote monitoring, for which they are offered reimbursement against fixed (negotiated) rates. Real-world data have shown that the programme is effective, and highly appreciated by patients.

Source: ETAPES: La télésurveillance France <https://solidarites-sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/telesante-pour-l-acces-de-tous-a-des-soins-a-distance/article/la-telesurveillance-etapes>

Integrated approach area 3: Integration of health promotion and disease prevention in the health system

Embedding health promotion and disease prevention efforts systematically in the health system, in particular regarding advice on lifestyle, can improve results and contribute to patient-centred integrated care. Re-orienting health systems towards health promotion and disease prevention, integrating lifestyle assessment and intervention into the practice of primary care professionals (and linking it to community resources) is an opportunity to improve health outcomes and the

efficiency of health systems¹³⁸. Below, the prevention and health promotion strategy of the Spanish National Health Service is provided as an example. Other countries also worked on integration of health promotion and disease prevention in the healthcare setting. For example, France adopted a “National sports and health strategy 2019-2024”, which also includes actions to support and prescribe adapted physical activity by primary care physicians¹³⁹.

Example: The prevention and health promotion strategy of the Spanish National Health Service

The strategy was launched in 2013. It proposes the progressive development of interventions aimed at improving health and preventing diseases, injuries and disability. The mission is to facilitate a common framework for health promotion and primary prevention in the course of life, harmonising its integration in the portfolio of services of the NHS and getting other sectors of society actively involved, promoting participation of individuals and population in order to raise their autonomy and capacity to have a greater control over their own health. It has a three-dimensional course of action: by populations, environments and factors to address. In the first stage, the populations prioritised were pregnant women, children (< 15) and those aged 50 years and older. The priority environments identified, in addition to the healthcare, were education and local settings. The factors addressed: healthy eating, physical activity, and tobacco and alcohol consumption, in addition to emotional wellbeing and a safe environment for preventing non-intentional injuries. Within the selected interventions for action, it includes: comprehensive counselling about life styles in primary healthcare, linked to community resources (for the child population, pregnant and breast-feeding women and the adult population), positive parenthood programme, local implementation of the strategy (which includes intersectoral coordination and identification and improvement of community resources) and frailty screening and preventive intervention for the elderly. The strategic lines include: strengthening public health, territorial coordination and governance, health equity, re-orientation of health services and intersectorality in health.

Source:

<https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/estrategiaPromocionyPrevencion.htm>

Integrated approach area 4: Enhancing and implementing effective screening approaches

Screening programmes are public health programmes that focus directly on the prevention of diseases and disabilities and can have a great positive impact on the health of the population. Their effectiveness depends not only on the prevalence of the condition among the population, but also on the actual effectiveness of the health system, expertise and available resources, and on the acceptability and the willingness of citizens to participate. A programmatic approach can improve equitable access to health and non-health benefits for citizens. Screening programmes should be based on screening guidelines and recommendations, should be proven acceptable for citizens and patients, and must pass clinical efficacy and cost-effectiveness studies before being implemented in a national or regional health system. Moreover, the access to representative real-world health data at national or European level can allow screening programmes to be designed in a more dynamic and targeted way, thus making them more impactful and economically sustainable.

Early intervention before the appearance of clinical symptoms prevents, in many cases, the appearance of deficiencies or reduces their severity in newborns and in the screened population, allowing a better quality of life for both those affected and their families. In other cases, such as prenatal screening for chromosomal abnormalities, the disability associated with the anomaly may not be avoidable, but having prenatal information allows the family to make decisions, and also allows faster access to early care and social benefits. Moreover, these programmes are often associated with a genetic counselling programme, which allows the family of a child with such a

¹³⁸

https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/Consejo_Integral_EstiloVida_en_AtencionPrimaria.pdf

¹³⁹ [rapport_snss_2019-2024_cs6_v5.pdf \(sports.gouv.fr\)](#)

disease or anomaly to have the necessary advice to make decisions about their reproductive options. Genetic counselling programmes should therefore address ethical, legal and social aspects. Genetic counselling can also reveal diseases in adult relatives and may help preventing complications and disabilities associated with the disease.

The main actions that might be carried out in relation to screening programmes include:

- Strengthen screening activities by implementing them as public health programmes;
- Implement improvement actions to ensure access, high-quality, efficacy and efficiency of national or regional screening programmes;
- Coordinate to standardise screening protocols for different diseases included in population screening programmes;
- Encourage neonatal metabolic screening (NBS) programmes to implement improvement actions to achieve high-quality objectives in terms of early detection, treatment and care, and build consensus on the diseases that should be included in the NBS programmes in countries¹⁴⁰;
- Encourage newborn hearing screening programmes to implement improvement actions to achieve quality objectives in terms of early detection, treatment and care;
- Strengthen and expand population screening information systems for continuous monitoring and evaluation of the quality of screening programmes;
- Reinforce information to citizens about screening programmes, so that they can understand their importance and take informed decisions on participation;
- Improve equitable access to screening programmes for citizens by taking away barriers for participation, including a lack of knowledge or trust, language barriers, financial barriers, barriers to access the screening location or other barriers;
- Implement specific actions to reach ethnic or linguistic minorities, people with limited health literacy or other vulnerable or hard-to-reach groups, for instance, by integrating low-threshold target-group specific approaches in structures that are being used by ethnic/linguistic minorities, vulnerable or hard-to-reach groups;
- Develop clinical guides for healthcare professionals and guides for patients and their families that allow a better understanding of the detected disease or impairment;
- Advance in research and update the scientific evidence for continuous advancing in the incorporation of new diseases in screening programmes that allow their early detection and avoid morbidity, disability and mortality caused by them;
- Strengthen targeted opportunistic screening by healthcare professionals to detect specific NCDs among high-risk populations or families (e.g., familial hypercholesterolemia¹⁴¹).

Integrated approach area 5: Implementing (updated) evidence-based guidelines for healthcare professionals

To improve the quality of NCD prevention, screening, early detection and management, public health and healthcare professionals need evidence-based guidelines which they can easily access, for instance, through digital tools. Guidelines for NCD prevention, screening, early detection need to be updated regularly and with sufficient granularity. Also, multidisciplinary guidelines may be needed to ensure high-quality interventions through the whole patient care pathway. In addition, guidelines may be developed and reviewed from the perspective of multimorbidity, as current guidelines to manage NCDs have been developed based on evidence from clinical trials that often exclude people with multimorbidity. As such, the effectiveness and cost-effectiveness of certain treatments for NCDs for people with multimorbidity is unknown, similarly their side-effects and

¹⁴⁰ Dima V. Actualities in neonatal endocrine and metabolic screening. Acta Endocrinologica (Buc), vol. XVII, no. 3, 2021. DOI: 10.4183/aeb.2021.294.

¹⁴¹ Rosso A, Pitini E, D'Andrea E, Massimi A, De Vito C, Marzuillo C, Villari P. The cost-effectiveness of genetic screening for familial hypercholesterolemia: a systematic review. Ann Ig 2017; 29(5): 464-480. DOI: 10.7416/ai.2017.2178.

safety. To ensure high-quality NCD prevention and management across the EU, countries and stakeholders may wish to focus on standardisation or alignment of guidelines. Countries may also wish to exchange good practice to improve the implementation of guidelines within the public health and healthcare setting, to reduce unwanted variation in quality and outcomes.

Integrated approach area 6: Health system redesign to deliver person-centred and integrated care

Multimorbidity is on the rise, which requires health systems to redesign service, as managing NCDs through single disease management approaches may no longer be appropriate, as they tend to ignore disease encompassing issues (e.g., coordination and integration of care provided by multiple care providers, polypharmacy, interfering preventive interventions and interactions in treatments). To improve the quality and outcomes of care for people with (multiple) NCDs, to support care professionals, and increase financial and social sustainability¹⁴², a system-wide approach is needed, preferably based in primary care, to facilitate person-centred integrated care that meet the comprehensive needs of people with multimorbidity. Integration of primary, hospital and specialised care can also improve the management of single NCDs. Such an integrated approach would also increase cost-effectiveness. **Digital tools** can support the integration of care.

Example: DIGA – Germany

The Digital Healthcare Act in 2019 introduced the “app on prescription” as part of healthcare provided to patients. 73 million insured patients are entitled to healthcare through digital health applications. All medical apps in scope of DIGA – mobile apps that are CE-marked as a medical device – must have the EU regulatory approval as a prerequisite, ensuring the safety, performance and demonstration of a clinical benefit, as well as deploying a robust market surveillance system. The DIGA system then has a set of requirements and criteria that a medical app has to meet in order to be prescribed by physicians and psychotherapists and to be reimbursed by health insurers.

Source: BfArM – Digital Health Applications (DiGA)

Several countries have piloted or implemented person-centred integrated care models at a local or regional level. Good practices have been identified, developed and implemented in EU Joint Actions, such as JA-CHRODIS and CHRODIS+ (e.g., the JA-CHRODIS Multimorbidity Care Model), and projects, such as ICARE4EU and SCIROCCO, funded by the EU Health Programme. The EU Public Health Best Practice Portal contains a number of innovative care models that have been piloted or implemented in EU countries. Integrated care models developed with EU funding for research and innovation can be found in the CORDIS database¹⁴³ of EU research results, for example the model developed in the SELFIE project (Sustainable intEgrated care modelS for multi-morbidity: delivery, Financing and performance; <https://cordis.europa.eu/project/id/634288>).

Transfer of good practices is also supported by Joint Actions, such as JA-JADECARE for integrated care and a new Joint Action for primary care to be launched in 2022 under the EU4Health Programme. Moreover, EU projects such as VIGOUR and SCIROCCO-Exchange, support the **scale-up** of integrated care implementation, via coaching and knowledge transfer to increase the capacity of healthcare authorities to implement successfully.

¹⁴² Countries may consider to develop, implement and monitor health system redesign based on the principles of the Quadruple Aim (Bodemeimer & Sinsky, 2014: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4226781/>) or the recently launched Quintuple Aim (Nundy et al., 2022: <https://jamanetwork.com/journals/jama/article-abstract/2788483>).

¹⁴³ The Community Research and Development Information Service (CORDIS) is the European Commission's primary source of results from the projects funded by the EU's framework programmes for research and innovation (FP1 to Horizon 2020).

Integrated approach area 7: Age-, gender- and culture-sensitive strategies

An intersectoral approach would facilitate identifying vulnerable groups and help design strategies to decrease the NCDs burden by addressing age, gender and cultural aspects. Age-, gender- and culture-sensitive health promotion, prevention and disease management could be achieved by resorting to co-designed public health strategies and person-centred care models. Special attention should therefore also be given to the specific needs, preferences and competencies of displaced people and refugees. Destigmatising strategies should also be included, and target both citizens and healthcare professionals.

Integrated approach area 8: Regulation and support for people with NCDs and their caregivers to facilitate social and labour participation

Integrated intersectoral approaches are needed to support children, adolescents and young adults living with NCDs to attend school, follow educational training and participate in sports and social activities, to ensure equity and prevent mental health problems, loneliness and exclusion.

Adults living with NCDs also need guidance to **access the labour market and support to return to work** after acute illness or medical treatment, while both adults with NCDs and caregivers need support to maintain or adjust their work to prevent early dropout of the labour market, which may negatively impact their lives in many ways. To **improve inclusiveness and promote the rights** of EU citizens with disabilities, the European Commission adopted the Strategy for the Rights of Persons with Disabilities 2021-2030. This strategy will contribute to the implementation of the European Pillar of Social Rights Action Plan, and help countries steer and support their policies on improving access to training and work for people with disabilities and carers. To support carers in combining care with work, the European Commission will also ensure that countries fully transpose the EU Work-life Balance Directive¹⁴⁴, which provides options for leave of carers and the possibility to request flexible working arrangements.

In the Joint Action CHRODIS+, together with stakeholders countries developed a Workbox on Employment and Chronic conditions¹⁴⁵ which provides tools and suggestions to assess and strengthen the inclusiveness of workplaces, to prevent the development of NCDs, to foster health, wellbeing and workability of employees, to support return to work after sick leave, and to help people with NCDs to stay at work. The Workbox provides checklists and training tools for managers and a comprehensive toolkit for workplaces, with practical tools to address lifestyle factors, ergonomics, creating a supportive work environment and increasing knowledge and understanding, suggestions for work arrangements to support return to work and prevent early drop-out, and policies to foster employees' health and wellbeing, including attention to mental health.

Integrated approach area 9: Improving the availability of NCD data for decision makers

Readily accessible data of high quality is crucial for health promotion and for the prevention of all NCDs. Thus, NCD surveillance systems that include representative nation- and EU-wide health data on the prevalence of all NCDs including mental health and neurological disorders are highly useful. The analysis of premature mortality in NCDs, the accurate measurement of lifestyle behaviours (e.g., tobacco use, physical activity) as well as of other risk factors (e.g., obesity, blood pressure, blood sugar level), the analysis of NCD severity (e.g., lung function) and disability can all deliver highly impactful, evidence-based and workable insights for all stakeholders, including policymakers, healthcare professionals and citizens at large. Existing public databases include for

¹⁴⁴ <https://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&newsId=9438&langId=en>

¹⁴⁵ <https://workbox.chrodis.eu/staging/>

instance the WHO European NCD dashboard¹⁴⁶ and the SCAPIS study that aim to predict and prevent cardiovascular and pulmonary disease¹⁴⁷. The high levels of interoperability and transparency on data quality, as well as the infrastructure provided by the European Health Data Space, will contribute to this endeavour. Obviously, in processing personal data, such as health and genetic data, all relevant legislation (General Data Protection Regulation (GDPR) and other personal data protection rules¹⁴⁸) will be complied with.

In addition, considering the important role of social determinants in the development and progress of NCDs, accurate accessible and up-to-date data are needed to monitor countries' progress in reducing social inequalities, poverty and unemployment.

Health determinants

Health determinants area 1: Control the use of tobacco and related products among the general population

Despite progress made in previous years, 23% of the EU overall population aged 15 and older were still regularly smoking tobacco in 2020¹⁴⁹. Some countries (e.g., Estonia, Finland, Iceland, the Netherlands, Norway and Sweden) have been quite successful in reducing the number of daily adult smokers, but many did not make substantial progress in the last ten years, and large differences between countries still exist¹⁵⁰. Furthermore, although smoking prevalence seems to be decreasing among young Europeans, the prevalence of emerging products such as e-cigarettes and heated tobacco products (HTPs) follows an opposite trend, with consumption of these products steadily increasing. Importantly, higher smoking rates are persistently found among middle to low-educated citizens, which contribute to the substantial difference in life expectancy between middle- to low- and high-educated citizens in EU countries. Therefore, high-impact actions are needed to improve awareness of the health risks of tobacco use among disadvantaged population groups, improve health literacy and support the resilience of individuals and communities¹⁵¹.

Policies that have proven to be effective or promising in this area and which may be prioritised by EU countries' authorities may include:

- Product regulation;
- Measures to increase price, increase the use of warnings and labels, and reduce advertisement, sponsorship and promotion of tobacco products;
- Measures to control the availability and density of tobacco retailers¹⁵²;

¹⁴⁶ <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/pages/who-european-office-for-the-prevention-and-control-of-noncommunicable-diseases-ncd-office/data-publications-and-tools/who-european-ncd-dashboard>

¹⁴⁷ The Swedish CArdioPulmonary bioImage Study| The SCAPIS study

¹⁴⁸ https://ec.europa.eu/info/law/law-topic/data-protection/data-protection-eu_en

¹⁴⁹ Attitudes of Europeans towards tobacco and electronic cigarettes. Special Eurobarometer 506. Report. European Commission, 2021. file:///H:/Downloads/ebs_506_en.pdf

¹⁵⁰ https://www.oecd-ilibrary.org/sites/82129230-en/1/3/2/2/index.html?itemId=/content/publication/82129230-en&_csp_=e7f5d56a7f4dd03271a59acda6e2be1b&itemIGO=oecd&itemContentType=book&_ga=2.194704677.901585610.1638700181-1696834570.1622818586

¹⁵¹ See also EU Cancer Plan implementation roadmap: https://ec.europa.eu/health/system/files/2022-01/2021-2025_cancer-roadmap1_en_0.pdf

¹⁵² For example: Pulakka A, Halonen JJ, Kawachi I, Pentti J, Stenholm S, Jokela M, Kaate I, Koskenvuo M, Vahtera J, Kivimäki M. Association Between Distance From Home to Tobacco Outlet and Smoking Cessation and Relapse. *JAMA Intern Med.* 2016 Oct 1;176(10):1512-1519. doi: 10.1001/jamainternmed.2016.4535. PMID: 27533777: <https://doi.org/10.1001/jamainternmed.2016.4535> and Valiente R, Escobar F, Urtasun M, Franco M, Shortt NK, Sureda X. Tobacco Retail Environment and Smoking: A Systematic Review of Geographic Exposure Measures and Implications

- Promotion of health literacy and awareness raising, tailored to the needs of disadvantaged individuals and communities;
- Promotion of work-based support programmes to quit tobacco use, complemented by primary healthcare programmes that may reach also unemployed persons¹⁵³;
- Promotion of programmes to quit tobacco use by using eHealth technology¹⁵⁴;
- Adjust legislation to cover new tobacco-related products to avoid legislative gaps in face of new forms of consumption.

In the Joint Action on Tobacco Control (JATC; 2017-2020) EU countries and stakeholders collaborated through the implementation and harmonisation of the Tobacco Product Directive (TPD) 2014/40/EU, which sets limits on the sale and merchandising of tobacco and related products. The results of the JATC showed there is ample opportunity for countries to join efforts to realise a more uniform high-quality technical capacity and infrastructure across EU countries to implement the TPD guidelines. The new Joint Action on Tobacco Control (JATC-2; 2021-2024) aims to further implement the TPD and the European Directive on Tobacco Advertising (TAD), and to promote activities aligned with the objectives of the WHO Framework Convention on Tobacco Control (WHO FCTC; see below).

Furthermore, countries may benefit from studying the results of the most recent report of the Tobacco Control Scale, which is an international comparative effort that identifies and compares policies and actions that have been implemented in EU countries and other countries. The 2019 report shows to what extent countries have made progress in implementing tobacco policies; it also confirms that for many EU countries there are still many opportunities to implement new and effective tobacco policies¹⁵⁵. The recommendations are summarised in the box below.

Recommendations of the Tobacco Control Scale 2019 in Europe report

1. Implement the six World Bank priority measures; a comprehensive tobacco control policy is an obligation under Article 4 of the WHO Framework Convention on Tobacco Control (FCTC).
2. Spend a minimum of EUR 2 per capita per year on tobacco control.
3. Address tobacco industry interference in public health policy making, in accordance with the guidelines on Article 5.3 of the WHO FCTC.
4. Implement the FCTC Article 6 guidelines on tobacco taxation and revise the EU Tobacco Tax Directive in 2020, which should result in significant tax increases and smaller tax differences between cigarettes and hand rolled tobacco.
5. Introduce comprehensive smoke free legislation in line with the FCTC Article 8 guidelines, including a ban on smoking in private cars when minors are present.
6. Introduce standardised/plain packaging for all tobacco products.
7. Ban the display of tobacco products at the point of sale.
8. Accelerate the implementation of tobacco cessation support in line with Article 14 of the WHO FCTC and its guidelines.
9. Ratify the WHO FCTC Protocol to eliminate the illicit trade in tobacco products and adopt tracking and tracing standards in line with the Protocol.
10. Invest in research to monitor and measure the effect of tobacco control policies in line with Article 20 of the WHO FCTC.

for Future Studies. Nicotine Tob Res. 2021 Aug 4;23(8):1263-1273. doi: 10.1093/ntr/ntaa223. PMID: 33155040; <https://doi.org/10.1093/ntr/ntaa223>

¹⁵³ Smith CE, Hill SE, Amos A. Impact of specialist and primary care stop smoking support on socio-economic inequalities in cessation in the United Kingdom: a systematic review and national equity initial review completed 22 January 2019; final version accepted 19 July 2019 analysis. Addiction. 2020 Jan;115(1):34-46. doi: 10.1111/add.14760. Epub 2019 Sep 10. PMID: 31357250; PMCID: PMC6973008: <https://doi.org/10.1111/add.14760>

¹⁵⁴ Jackson SE, Kotz D, West R, Brown J. Moderators of real-world effectiveness of smoking cessation aids: a population study. Addiction. 2019 Sep;114(9):1627-1638. doi: 10.1111/add.14656. Epub 2019 Jul 6. PMID: 31117151; PMCID: PMC6684357: <https://doi.org/10.1111/add.14656>

¹⁵⁵ Joossens L, Feliu A, Fernandez E. The Tobacco Control Scale 2019 in Europe. Brussels. Association of European Cancer Leagues. Catalan Institute of Oncology. 2020. <https://www.tobaccocontrolscale.org/TCS2019.pdf>

Source: Joossens L, Feliu A, Fernandez E. The Tobacco Control Scale 2019 in Europe. Brussels. Association of European Cancer Leagues. Catalan Institute of Oncology, 2020. <https://www.tobaccocontrolscales.org/TCS2019.pdf>

The WHO has formulated Best Buys and other recommended interventions to address NCDs, of which a number focus on the control of tobacco smoking (see below).

WHO Best Buys and other recommended interventions from WHO guidance

Best buys:

1. Increase excise taxes and prices on tobacco products.
2. Implement plain/standardised packaging and/or large graphic health warnings on all tobacco packaging.
3. Enact and enforce comprehensive bans on tobacco advertising, promotion, and sponsorship.
4. Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, and public transport.
5. Implement effective mass-media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke.

Other effective and recommended interventions:

6. Provide cost-covered, effective and population-wide support (including brief advice, national toll-free quit line services) for tobacco cessation to all those who want to quit.
7. Implement measures to minimize illicit trade in tobacco products.
8. Ban cross-border advertising, including modern means of communication.
9. Provide mobile phone based tobacco cessation services for all those who want to quit.

Source: World Health Organization. Saving lives, spending less: the case for investing in non-communicable diseases'. December 2021. Source: World Health Organization. Saving lives, spending less: the case for investing in non-communicable diseases'. December 2021. <https://apps.who.int/iris/rest/bitstreams/1399949/retrieve>

A progress update on how countries perform regarding the implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC) may provide further suggestions for EU countries to implement policies to control the use of tobacco and related products among the general population (see below).

The WHO Framework Convention on Tobacco Control (WHO FCTC)

The WHO Framework Convention on Tobacco Control (WHO FCTC) provides the legal foundation for countries to implement and manage tobacco control. In 2008, the WHO introduced a package of six evidence-based measures under the acronym of MPOWER, which support scale-up of provisions of the WHO FCTC at country level. These measures include:

- **M**onitoring tobacco use and prevention policies;
- **P**rotecting people from tobacco smoke;
- **O**ffering help to quit tobacco use;
- **W**arning about the dangers of tobacco;
- **E**nforcing bans on tobacco advertising, promotion and sponsorship; and
- **R**aising taxes on tobacco.

The implementation of these measures has proven to reduce tobacco consumption. The WHO has published five progress reports on the activities of all countries in relation to these six measures as well as a factsheet on the implementation of the MPOWER measures specifically in the WHO European Region in 2019. Note that the results below apply to the whole European Region (53 countries) and not to the EU-27 in particular.

This factsheet describes that in 2019 most countries of the European Region appear to be performing well in monitoring tobacco use and prevention policies (74% of the countries offer this measure at the recommended implementation level) and in warning about the dangers of tobacco (72%). The European Region is also performing better than globally on raising taxes on tobacco (47%), although more than half of European Region countries levy taxes below best-practice level. Offering support to quit tobacco use is at the recommended implementation level in only 15% of the European Region countries. The percentage of countries with comprehensive smoke-free laws is lower in the European Region than at global level (26%

and 32% respectively). With 21 countries having partial laws in 2019, more needs to be done to introduce comprehensive smoke-free laws to protect people from the harms of second-hand smoke. Furthermore, almost twice as many countries at global level ban all forms of advertising, promotion and sponsorship of tobacco products than in the WHO European Region (25% versus 13%).

Source: <https://www.euro.who.int/en/health-topics/disease-prevention/tobacco/publications/2020/factsheets-on-who-fctc-implementation-through-mpower-in-the-who-european-region-2020>

The European Network for Smoking and Tobacco Prevention (ENSP) is monitoring and supporting the implementation of the WHO FCTC measures in Europe. Related to the measure 'Offer help to quit smoking', together with 15 European countries the ENSP developed an accredited eLearning training platform in 2018 for healthcare professionals on tobacco treatment, which could be further implemented. The maintenance of the platform and the extension of the course in new languages and new modules is funded for EU countries by the EU Health Programme (see EU Public Health Best Practice Portal: <https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=379>).

In several regions in the EU, policies have been implemented to reduce smoking in various settings, including the workplace. An example of a work-based support programme is the best practice 'Lombardy Workplace Health Promotion Network' (below), which offers an integrated approach to support healthy behaviours, including a smoke-free environment and support to quit smoking. Also, the Toolbox for Workplaces, developed in the Joint Action CHRODIS, provides policies and interventions for health promotion at the workplace, including no smoking policies and interventions (e.g., launching a challenge to motivate employees to quit smoking with incentives and commitment to the challenge by signing a contract).

Example: Best practice 'Workplace Health Promotion - Lombardy Network'

The Lombardy Workplace Health Promotion Network is made up of companies which recognise the value of corporate social responsibility and undertake health actions (evidence-based) of different nature: informational (smoking cessation, healthy eating, etc.), organisational (canteens, snack vending machines, agreements with gyms, stairs health programmes, walking / biking from home to work, smoke-free environment, baby pit-stop, etc.) and collaboration with others in the local community.

Source: [the-lombardy-workplace-health-promotion-network \(chrodis.eu\)](https://www.chrodis.eu/en/the-lombardy-workplace-health-promotion-network)

Health determinants area 2: Prevent children, adolescents, and young adults from starting to use tobacco and related products

Although the prevalence of tobacco use seems to be decreasing among young Europeans, a persistent high proportion of youth (21%) are taking up smoking. Of all smokers and former smokers in 2020, more than half (54%) started smoking regularly before their 18th birthday. Among 15 to 24 years old (former) smokers, those who left full-time education before the age of 15 and those who are unemployed were most likely to start smoking already before the age of 15¹⁵⁶. Furthermore, as mentioned above, the use of emerging products such e-cigarettes, nicotine pouches and HTPs is steadily increasing.

Regarding tobacco smoking, it appears that almost one in five people aged 15 years living in the EU smoked cigarettes at least once per month in 2018, with Bulgaria (32%), Italy (29%) and Lithuania (29%) having the highest smoking rates. Although smoking tobacco among this age group has decreased in most countries since 2014, this is not the case in Bulgaria, Italy, Latvia, Lithuania, and Romania. Croatia and Hungary – belonging to the countries with the highest smoking rates among 15 years old in 2014 – achieved a substantial reduction, although both are

¹⁵⁶ Attitudes of Europeans towards tobacco and electronic cigarettes. Special Eurobarometer 506. Report. European Commission, 2021. file:///H:/Downloads/ebs_506_en.pdf

still above EU average. France also made significant progress in reducing smoking among those aged 15 years to EU average in 2018¹⁵⁷.

Although smoking cessation is the most frequent reason to start using e-cigarettes, this is less the case among those aged 15 to 24 years using e-cigarettes. Among these young users, one third started with e-cigarettes to stop or reduce their tobacco consumption. Users of e-cigarettes aged 15 to 24 are more likely than older users to believe that vaping is less harmful than tobacco smoking, to consider e-cigarettes cool or attractive, to like their flavours and to have friends using e-cigarettes¹⁵⁸. In order to protect adolescents and young adults, many countries therefore decided on a flavour ban for e-cigarettes.

A number of policies have proven to be effective or promising in this area, including approaches that particularly target girls or boys:

- School-based programmes for preventing smoking, which also involve parents and carers, and take social influence and social competence into consideration;
- Practices on influencing the environment, for instance in sport canteens.

Some best practices initiated by NGOs have been rewarded as outstanding initiatives on the prevention of tobacco use among young people (2018 EU Health Awards¹⁵⁹). The three prize winning initiatives are mentioned below as examples; the eight other candidates are mentioned in Annex 4).

Example: X-HALE youth smoking prevention programme Irish Cancer Society

Since 2011, the Irish Cancer Society has worked in partnership with over 270 youth groups from across Ireland to drive the movement towards a tobacco-free generation. Using a train the trainers approach, the X-HALE programme equips youth organisations with the skills and framework to address tobacco in their communities. In youth friendly sessions organised by the youth organisations, young people are encouraged to explore the impact of tobacco and the factors that influence their decision to start smoking. Young people that participate in these sessions are empowered to become tobacco free advocates. In 2015, the X-HALE programme was further extended to include training delivery and resource provisions to school teachers.

Source: https://ec.europa.eu/health/eu-health-policy/interest-groups/eu-health-award/eu-health-award-previous-editions/2018-eu-health-award-ngos_en

Example: Education Against Tobacco

Education Against Tobacco is a multinational network driven by >3 500 volunteering medical students and physicians from 82 medical schools located in 14 countries worldwide. Its mission is to deliver school-based prevention, to help smokers quit on a population basis via free evidence-based smoking cessation apps, to improve physician-delivered smoking cessation counselling by training physicians in elective courses at medical schools and to promote tobacco control by entering into dialogue with politicians.

Source: https://ec.europa.eu/health/eu-health-policy/interest-groups/eu-health-award/eu-health-award-previous-editions/2018-eu-health-award-ngos_en

The school-based prevention programme targets adolescents (10 to 15 years old) by using a multimodal approach, including the implementation of self-developed apps (i.e., the face morphing app 'Smokerface') on their smartphones.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=340> (European Commission Best Practice Portal)

¹⁵⁷ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

¹⁵⁸ Attitudes of Europeans towards tobacco and electronic cigarettes. Special Eurobarometer 506. Report. European Commission, 2021. file:///H:/Downloads/ebs_506_en.pdf

¹⁵⁹ 2018 EU Health Award for NGOs (europa.eu)

Example: Youth Network No Excuse Slovenia

The No Excuse Slovenia programme focuses on training young people as activists in the fight against tobacco. Through a training for activists targeting 14 to 15 years old and a subsequent school-based training targeting 7th grade primary students and 1st grade secondary students, the programme focuses on the following (1) development of social skills; (2) the development of drug prevention skills (3) the development of decision-making skills and (4) the correction of wrong normative assumptions among young people. Since its onset, 613 young people have completed the 1000-hour training programme for activists and another 135 000 participants have been reached through the school-based programme.

Source: https://ec.europa.eu/health/eu-health-policy/interest-groups/eu-health-award/eu-health-award-previous-editions/2018-eu-health-award-ngos_en

Health determinants area 3: Reduce harmful consumption of alcohol among the general population

Considerable differences exist between EU countries in the patterns of alcohol consumption and the trends therein. Between 2010 and 2016, these patterns either improved or deteriorated in countries, with an overall small improvement at EU level. Still, harmful alcohol consumption in the EU is associated with deaths due to cancer, cardiovascular disease, liver cirrhosis, and injuries¹⁶⁰.

In relation to harmful alcohol consumption, countries may wish to pursue a range of policies that prioritise the protection of health-in-alcohol policies. Policies should also contribute to the objective of Europe's Beating Cancer Plan of reducing harmful¹⁶¹ alcohol consumption by at least 10% by 2025, taking into account the available evidence¹⁶² and the WHO Global Alcohol Action Plan, which has the objective to reduce alcohol consumption by 20% in 2030 (baseline 2010)¹⁶³.

Comprehensive packages of interventions that include both fiscal measures, regulations and health promotion actions have proven to be the most effective in reducing harmful alcohol consumption. For regulatory measures, enforcement has been proven key for success, for instance, for advertisement framing and alcohol consumption limits for driving¹⁶⁴. Regarding the latter, it is of note that all EU countries have set maximum levels of blood alcohol concentration for drivers in their legislation, but these regulations are not always enforced rigorously¹⁶⁵. Minimum pricing of alcohol units has shown to reduce alcohol purchases, especially among households that had the highest alcohol consumption¹⁶⁶.

Policy options may include:

¹⁶⁰ WHO. 2019. Status Report on alcohol consumption, harm and policy responses in 30 European countries 2019. Copenhagen.

¹⁶¹ Harmful consumption of alcohol is broadly defined as "drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as patterns of drinking that are associated with increased risk of adverse health consequences" (Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization; 2010: https://www.who.int/substance_abuse/publications/global_strategy_reduce_harmful_use_alcohol/en/, accessed 19 April 2020).

¹⁶² https://www.euro.who.int/__data/assets/pdf_file/0009/386577/fs-alcohol-eng.pdf

¹⁶³ https://cdn.who.int/media/docs/default-source/alcohol/alcohol-action-plan/first-draft/global_alcohol_acion_plan_first-draft_july_2021.pdf?sfvrsn=fcdab456_3&download=true

¹⁶⁴ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en

¹⁶⁵ OECD. Tackling Harmful Alcohol Use: Economics and Public Health Policy. Paris, 2015: OECD Publishing. <http://dx.doi.org/10.1787/9789264181069-en>

¹⁶⁶ O'Donnell A, et al. Immediate impact of minimum unit pricing on alcohol purchases in Scotland: controlled interrupted time series analysis for 2015-18. *BMJ* 2019, p. l5274, <http://dx.doi.org/10.1136/bmj.l5274>

- Adopting measures on pricing (considering inflation and the affordability of alcohol in relation to welfare levels in a country), advertisement, sponsorship and promotion of alcohol drinks (including cross-border promotion). Such measures should cover low- and non-alcoholic product promotion, to prevent indirect promotion of alcoholic beverages¹⁶⁷;
- Strengthening of restrictions on the availability of alcohol (number, density and location of places, opening hours, etc.), including distance selling (online or by phone) and delivery systems associated with alcohol, and reducing access to the youth;
- Considering health warnings and mandatory labelling of ingredients and nutrition declaration on alcoholic beverages labels to increase consumers' information and awareness of the risks associated with alcohol consumption;
- Reinforcing surveillance and enforcement of existing (and novel) measures;
- Supporting programmes to reduce the harmful consumption of alcohol among the general population and to prevent alcohol consumption among the young;
- Facilitating access to screening, brief interventions and treatment. This should be specially targeted at pregnant women (or women/families who are wishing to conceive) and generally contribute to identify and support people at high risk of/with harm due to their consumption of alcohol.

The consumption of alcohol by women during their pregnancy can cause Fetal Alcohol Spectrum Disorders (FASD) in their (unborn) children (i.e., lifelong physical, mental and behavioural disorders). As FASD is incurable, prevention is important and should target not only women of childbearing age, but also their social environment and increase awareness of the danger of alcohol consumption during pregnancy in society as a whole.

The EU Joint Action on Alcohol Related Harm (RARHA) has presented an inventory of various interventions with a classification of type, setting, stakeholder involvement and effectiveness¹⁶⁸. Countries may also consider the interventions proposed by WHO in collaboration with international partners in the SAFER initiative or WHO Best Buys and other recommended interventions to address NCDs, of which a number focus on alcohol consumption (see box below)^{169,170}.

WHO Best Buys, WHO SAFER initiative and other recommended interventions from WHO guidance

WHO Best buys

1. Increase excise taxes on alcoholic beverages
2. Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media)
3. Enact and enforce restrictions on the physical availability of alcohol in sales outlets (via reduced hours of sale)

SAFER initiative

WHO launched the SAFER initiative in 2018, in collaboration with international partners. 'SAFER' is an acronym for the five most cost-effective interventions to reduce alcohol related harm:

- S – Strengthen restrictions on alcohol availability
- A – Advance and enforce drink driving counter measures
- F – Facilitate access to screening, brief interventions and treatment
- E – Enforce bans or comprehensive restrictions on alcohol advertising, sponsorship and promotion

¹⁶⁷ <https://www.deep-seas.eu/>

¹⁶⁸ Rados Kmel S, Budde A, Van Dalen W, Van Dale D, Vegt K et al. Public Awareness, school-based and early interventions to reduce alcohol related harm. A toolkit for evidence-based good practices. National Institute of Public Health, Ljubljana, 2016.

¹⁶⁹ <https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y>

¹⁷⁰ <https://www.paho.org/en/documents/safer-technical-package-five-areas-intervention-national-and-subnational-levels>

R – Raise prices on alcohol through excise taxes and pricing policies

Source: <https://www.who.int/initiatives/SAFER>

Other effective and WHO recommended interventions

1. Enact and enforce drink-driving laws and blood alcohol concentration limits via sobriety checkpoints
2. Provide brief psychosocial intervention for persons with hazardous and harmful alcohol consumption
3. Carry out regular reviews of prices in relation to level of inflation and income
4. Establish minimum prices for alcohol where applicable
5. Enact and enforce an appropriate minimum age for purchase or consumption of alcoholic beverages and reduce density of retail outlets
6. Restrict or ban promotions of alcoholic beverages in connection with sponsorship and activities targeting young people
7. Provide prevention, treatment and care for alcohol consumption disorders and comorbid conditions in health and social services
8. Provide consumer information about, and label, alcoholic beverages to indicate, the harm related to alcohol

Source: World Health Organization. Saving lives, spending less: the case for investing in non-communicable diseases'. December 2021. Source: World Health Organization. Saving lives, spending less: the case for investing in non-communicable diseases'. December 2021. <https://apps.who.int/iris/rest/bitstreams/1399949/retrieve>

Source: World Health Organization. 'Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Updated (2017) appendix of the Global Action Plan for the prevention and control of noncommunicable diseases 2013-2020. https://www.who.int/ncds/management/WHO_Appendix_BestBuys_LS.pdf

Below two examples are provided; the first is a nationwide approach from Spain, which may be inspiring for other countries; the second is an example of a more targeted approach to train primary care professionals to offer a brief support intervention to users of primary care services with alcohol-related problems.

Example: Spanish policy actions to reduce alcohol consumption

In 2020, Spain started a national working group with regional representatives on the prevention of alcohol consumption, complementing other pre-existing groups from the National Drug Strategy, but focusing specifically on alcohol. In 2021, the Group published a document with 23 lines of actions that were approved by the Public Health Commission of the Interterritorial Council. The 23 lines of actions are framed under three objectives: 1) Promote the prevention of alcohol consumption as a public health priority, 2) Establish a common framework for the prevention and control of alcohol consumption, and 3) Coordinate healthcare for the prevention and control of alcohol consumption in the Spanish National Health System with an equity perspective.

Source:

https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Prevencion/alcohol/docs/Lineasactuacion_PreventionConsumoAlcohol.pdf

In 2021, the Spanish Ministry of Health published the Low Risk Alcohol Consumption Thresholds Update, which includes a review of literature of the available evidence with the collaboration of a panel of experts. Accompanying the document, relevant materials were developed, including:

- A video: "Information for policymakers. What can the public administrations do?"
- Materials for healthcare professionals, including information on how to discuss alcohol consumption during consultations with patients, and being aware of equity issues
- Materials for citizens, including tips to reduce alcohol consumption, addressing binge drinking, gender-specific issues, the difference of the effects on men and women, etc.

Source:

https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Prevencion/alcohol/Low_Risk_Alcohol_Consumption_Thresholds.htm

The Spanish National Strategy on Addictions 2017-2024 provides a policy action framework for the development of policies on addictions to be implemented within the Spanish State as a whole, the autonomous communities and cities and the local corporations, and it is used as a reference document by NGOs for any activities they too may carry out in this area. It is designed around two overarching goals with a number of different strategic objectives grouped within several policy action areas. These areas are

supported in turn by six cross-cutting themes. The two goals are: a) “To achieve” a healthier and better-informed society through a reduction in the demand for drugs and in the prevalence of addictions in general, and b) “To have” a more secure by reducing the supply of drugs and controlling any activities that might lead to addictions. The scope includes: legal drugs (tobacco, alcohol), prescription drugs and other substances with addictive potential; and illegal drugs, including new psychoactive substances and non-substance addictions or behavioural addictions. The Action Plan 2021–2024 has been recently launched. It works in coordination with the prevention and health promotion strategy of the Spanish NHS.

Source: <https://pnsd.sanidad.gob.es/pnsd/estrategiaNacional/home.htm>

Example: Best practice “Drink Less” programme

The “Drink Less” programme aims to reduce risky drinking and alcohol-related problems affecting the population attending the primary health centres. In order to get an early and brief intervention for risky consumption, the programme provides the primary health centres’ professionals with training and suitable support instruments for consultations.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=209> (European Commission Best Practice Portal)

Health determinants area 4: Prevent the consumption of alcohol among children, adolescents, and young adults

Alcohol consumption often starts in adolescence. About 38% of 15–16 years old reported having had an episode of binge drinking in the last month. High alcohol intake is associated with increased risk of heart and liver diseases and contributes to premature deaths and disabilities as a result of car accidents and violence amongst others¹⁷¹. A number of policies have proven to be effective to reduce alcohol consumption among young people, as described in a recent systematic review¹⁷², such as limiting accessibility to alcohol (e.g., through restrictions on location and hours of sales, and raising the minimum legal age for drinking), increasing prices (through taxation or minimum pricing of alcohol units), banning advertisements in traditional and social media, and restricting industry sponsorship of sport and youth events¹⁷³. In January 2018, Lithuania introduced new legislation on alcohol particularly targeting young people; the legal drinking age was raised from 18 to 20 years, the opening hours for sales in retail stores were restricted, and all advertising for beers, wines and spirits was banned¹⁷⁴.

Policy options that countries may consider implementing are:

- Limiting access to alcohol by raising the minimum age for drinking alcohol and limiting the options for selling alcohol and increase prices;
- Statutory regulations on (digital¹⁷⁵) alcohol advertising, sponsorship (especially in those events with children and young people, e.g., cultural, sports, advertising in consumer establishments, and promotion of alcohol drinks (including cross-border). Paying special attention to all digital and social media, and networks. Strengthen restrictions on the availability of alcohol (number, density and location of places – special protection for children's environments, hours, etc.);

¹⁷¹ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en

¹⁷² Systematic review of the effect of policies to restrict the marketing of foods and non-alcoholic beverages to which children are exposed (wiley.com)

¹⁷³ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

¹⁷⁴ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en

¹⁷⁵ <https://www.euro.who.int/en/health-topics/Life-stages/pages/news/news/2021/12/who-report-on-digital-marketing-of-alcohol-control-policies-in-the-european-region-are-not-enough>

- School-based (eHealth or face-to-face) interventions that prevent engaging in multiple risk behaviours, including the use of alcohol, smoking and illicit drug use, free of conflict of interest from the alcohol and tobacco industry;
- (Brief) interventions to prevent recurrence and alcohol related problems in adolescents and young adults admitted to acute care services after an alcohol related event;
- Interventions to raise awareness of citizens about the harm of alcohol consumption during pregnancy;
- Improve early diagnosis of Fetal Alcohol Spectrum Disorders (FASD), identifying populations at risk of prenatal exposure to alcohol (for example, with social risk factors) and at risk of FASD (for example, adoptions from Eastern European countries). Identify and train professionals directly involved in diagnosis and treatment, such as professionals in medicine (paediatrics, psychiatry, etc.), nursing, psychology, social work, education, etc.

Example: best practice 'Web-based individual coping and alcohol-intervention programme'

The purpose of the programme Web-ICAIP is to strengthen adolescents' coping behaviour, improve their mental health, and postponing the onset or decreasing risky alcohol consumption.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=219>. (European Commission Best Practice Portal)

Example: statutory ban on alcohol advertising to children

This intervention covers a comprehensive ban for all forms of media (TV, radio, newspapers, billboard, internet, social media) and is modelled based on a study by Tanski et al. (2015)¹⁷⁶, which covers any form of marketing and develops a perceptivity score (based on exposure, liking and brand identification). Assuming a 10% failure rate, a total ban on advertising to children would reduce early onset of drinking by 35% in individuals aged 17 years or below. In addition, the model assumes a relationship between early onset of drinking and the probability of dependence, based on evidence that people starting to drink after the legal drinking age have a risk of dependence 30% lower than those who drink while underage (Hingson et al., 2006)¹⁷⁷.

Source: OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/6e4b4ffb-en>.

Health determinants area 5: Reduce unhealthy eating, physical inactivity, overweight and obesity among the general population

Unhealthy eating and physical inactivity are risk factors for many non-communicable diseases (NCDs). Also, obesity is one of the key risk factors for many NCDs. Overweight and obesity affect almost 60% of adults in the European Region. Recent estimates suggest that overweight and obesity is the fourth most common risk factor for NCDs, after high blood pressure, dietary risks and tobacco¹⁷⁸.

The prevalence of overweight/obesity is the highest among the least educated¹⁷⁹. In 2019, 59% of all adults with a low education level living in the EU were overweight, while this was 44% among those with a high education level. Similarly, of the people with a low education level, 20% were

¹⁷⁶ Tanski, S. et al. (2015), "Cued recall of alcohol advertising on television and underage drinking behavior", JAMA Pediatrics, Vol. 169/3, pp. 264-271, <http://dx.doi.org/10.1001/jamapediatrics.2014.3345>.

¹⁷⁷ Hingson, R., T. Heeren and M. Winter (2006), "Age at drinking onset and alcohol dependence: Age at onset, duration, and severity", Archives of Pediatrics and Adolescent Medicine, Vol. 160/7, pp. 739-746, <http://dx.doi.org/10.1001/archpedi.160.7.739>.

¹⁷⁸ WHO European regional obesity report 2022: <https://apps.who.int/iris/bitstream/handle/10665/353747/9789289057738-eng.pdf>

¹⁷⁹ 2020_healthatglance_rep_en.pdf (europa.eu)

obese, whereas this was the case for 11% of the adults with a high education level¹⁸⁰. Particular attention should therefore be paid to people with a lower education level or in a more vulnerable socioeconomic position (SEP). Stress is also a risk factor for obesity.

Community-based strategies and policies aimed at structural changes to the environment have proven to be effective among lower SEP populations, whereas this is not always the case for interventions that are primarily based on information provision directed at individual behaviour change.

Policy options include:

- Increase healthy food intake (vegetables, fruits, fibres) and reduce unhealthy diets (less salt, sugar, and fat intake) by population-based programmes, including the creation of awareness and simple labelling of food¹⁸¹.
- Reduce the total consumption of food (calories).
- Create fiscal incentives to support family and industry decision-making. Taxes, fees and other fiscal measures can support reformulation, create markets for innovative products and nudge consumer decisions towards healthier options.
- Personalised lifestyle technology interventions.
- Lifestyle promotion programmes on healthy eating, physical activity and weight control integrated in health system (primary health care).
- Lifestyle programmes on diet, physical activity, and possibilities for voluntary weight control at workplaces and among unemployed people.
- Incentives that stimulate exercise.
- Creating a supportive environment that encourages active transport and physical activity.
- Measures to improve the nutritional quality of the food supply, e.g., nutritional standards, collective agreements.
- Promotion of healthy settings (health, work, local, education, etc.)
- Promotion of measures on food composition, food labelling, food marketing and promotion, food provision, food retail, food prices, food procurement, and food trade and investment (as described in the Food-EPI tool¹⁸²); also, the NOURISHING Framework give important input to what could be done; and reference the WHO/Europe | Physical activity – Policy¹⁸³. The WHO recommendations on the marketing of foods and non-alcoholic beverages to children can provide guidance to EU countries to develop and implement effective policies in this area¹⁸⁴. These policies would focus on foods high in saturated fats, trans-fatty acids, free sugars or salt.

¹⁸⁰ <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210721-2>

¹⁸¹ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris.
https://doi.org/10.1787/health_glance_eur-2018-en

¹⁸² <https://www.informas-europe.eu/food-epi/>

¹⁸³ <https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y>

¹⁸⁴ <https://www.who.int/publications/i/item/9789241500210>

Example: WHO Best buys

1. Reduce salt intake through the reformulation of food products to contain less salt, and the setting of maximum permitted levels for the amount of salt in food
2. Reduce salt intake through establishing a supportive environment in public institutions such as hospitals, schools, workplaces and nursing homes, to enable low-salt options to be provided
3. Reduce salt intake through behaviour change communication and mass-media campaigns
4. Reduce salt intake through the implementation of front-of-pack labelling
 - Reduce sugar consumption through effective taxation on sugar-sweetened beverages
 - Promote and support exclusive breastfeeding for the first six months of life
 - Implement subsidies to increase the intake of fruits and vegetables
 - Replace trans-fats and saturated fats with unsaturated fats
 - Limiting portion and package size to reduce energy intake and the risk of overweight/obesity
 - Implement nutrition education and counselling in different settings (for example, in preschools, schools, workplaces and hospitals) to increase the intake of fruits and vegetables
 - Implement nutrition labelling to reduce total energy intake (kcal), sugars, sodium and fats
 - Implement mass media campaign on healthy diets, including social marketing to reduce the intake of total fat, saturated fats, sugars and salt, and promote the intake of fruits and vegetables

Source: World Health Organization. Saving lives, spending less: the case for investing in non-communicable diseases. December 2021. <https://apps.who.int/iris/rest/bitstreams/1399949/retrieve> and <https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y>

Example: increase awareness about the Keyhole food label

Denmark has implemented several national campaigns in order to increase awareness about the Keyhole food label and thereby to promote healthier eating habits. The campaigns have been implemented as a joint venture with the industry¹⁸⁵, retailers and different partnership organisations.

Source: www.oecd.org/health/obesity-update.htm, OECD 2017

Policies to reduce **overweight and obesity** focus on reducing unhealthy diets and increasing physical activity. However, chronic overweight and obesity in adults are conditions that may also need to be managed within the healthcare sector, with the aim to manage and reduce overweight by a combination of medical and lifestyle interventions. Many overweight- and obesity-focused interventions have been developed and effectively applied in primary care settings.

Furthermore, to provide better prevention and medical care for obesity patients, healthcare professionals may benefit from additional training and additional targeted research.

Example: Healthy Weight for Ireland: Obesity Policy and Action Plan 2016-2025

The Government's Healthy Weight for Ireland: Obesity Policy and Action Plan 2016-2025 sets out a 10-step multi-sectoral action plan that aims to increase the number of people with a healthy weight and to remove the stigma associated with obesity especially in children. Dealing with socio-economic inequalities in the occurrence of overweight and obesity is a particular priority of this action plan.

Source: <https://health.gov.ie/wp-content/uploads/2016/09/A-Healthy-Weight-for-Ireland-Obesity-Policy-and-Action-Plan-2016-2025.pdf>

¹⁸⁵ In general, it is important to mention that partnership initiatives that include industry tend to be less effective than regulation.

Health determinants area 6: Reduce unhealthy eating, physical inactivity, overweight and obesity among children and adolescents

Unhealthy eating and physical inactivity are risk factors for many non-communicable diseases. Overweight at young age increases the risk of poor health at older age. Overweight and obesity affected nearly one in three children (29% of boys and 27% of girls) in the European Region between 2015 and 2017¹⁸⁶. Early studies from a number of countries in the Region indicate that the prevalence of overweight and obesity and/or mean body mass index has increased in children and adolescents during the COVID-19 pandemic, due to an increase in screen time/sedentary lifestyles and consumption of unhealthy foods.

The availability of high-energy foods and a sedentary lifestyle has contributed to the growth of obesity prevalence¹⁸⁷. For children, the WHO recommends at least 60 minutes of moderate to vigorous physical activity per day. In 2018, only one in four 11 years old and one in seven 15 years old reported these levels of physical activity. Heavy use of mobile devices and the internet, and a lack of safe spaces and equipment to be able to exercise limit the physical activity of adolescents. Good habits regarding physical activity during childhood may be continued in adulthood¹⁸⁸. Another dimension is to protect children and adolescents from exposure to food marketing for fatty, sugary, salty products, whose impact on health and in particular overweight and obesity in children has been demonstrated.

It should be noted that multi-component interventions, e.g., that combine interventions focusing on both healthy eating and increasing physical activity, and stress management, are more effective than interventions that focus on diet or physical activity only¹⁸⁹. These interventions should involve both teachers and parents; including digital components are a promising strategy. Note that including aspects that particularly target girls or boys may be promising.

Policy options include:

- Update public procurement guidelines for purchasing food.
- Provide healthy meals at school and ensure compliance with regulations relating to school canteens.
- Update the regulation of marketing of unhealthy foods and beverages to children below 18 years in accordance with WHO's recommendations and ensure compliance.
- Update and ensure compliance with the regulations related to vending machines and canteens in schools.
- Develop integrate health-promoting approaches in schools, supporting healthy eating and physical activity (from food-related skills in the curriculum to free drinking water to using social media and gamification to nudge behavioural change).
- Develop tax benefits to the promotion of physical activity and active mobility.
- Promote breastfeeding.

¹⁸⁶ WHO European regional obesity report 2022:
<https://apps.who.int/iris/bitstream/handle/10665/353747/9789289057738-eng.pdf>

¹⁸⁷ OECD/EU (2018), Health at a Glance: Europe 2018: State of Health in the EU Cycle, OECD Publishing, Paris.
https://doi.org/10.1787/health_glance_eur-2018-en

¹⁸⁸ OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, <https://doi.org/10.1787/82129230-en>

¹⁸⁹ https://apps.who.int/iris/bitstream/handle/10665/204176/9789241510066_eng.pdf

Example: Smart Family (Finland)

Smart Family is a lifestyle counselling programme developed by healthcare professionals in 2006, to prevent and tackle childhood obesity. It is an ongoing programme used in almost every municipality in Finland. (It reaches approximately 90% of Finnish families in maternity clinics, child welfare clinics and school clinics.) It has been expanded for multi-professional use, by all professionals working with families with children. Smart Family provides professionals with a method and tools for bringing up lifestyle issues with families and provide lifestyle counselling. The method and tools could be used with every family (children from unborn to 12 years of age). For families, Smart Family provides information and support on lifestyle choices.

Source:

https://ec.europa.eu/health/other-pages/basic-page/online-marketplace-event-best-practices-risk-factors-non-communicable-diseases_pl (selected as 'best' practice at the EU BBP and presented at the Online Market Place event 30 June/1 July 2021)

Example: best practice 'Hungarian Aqua Promoting Programme in the Young (HAPPY) and HAPPY Week'

The aim of this programme is to promote water consumption and decrease the consumption of sugary soft drinks among pre-school and primary school students, contributing to halting the rise in overweight or obesity in children. The approach used is the provision of healthy choices (free drinking water by water coolers or bottled water), education, awareness raising, in few cases also change in built environment by installing water fountains.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=173> (European Commission Best Practice Portal)

Example: best practice 'Intervention improving the food supply (excluding school meals) with educational support in middle and high schools'

The aim of this intervention is to improve the eating habits of adolescents by:

1. Raise awareness of directors and teachers in middle and high schools to the importance of remove/limit fat and sugar products at school breaks (dissemination of national recommendations).
2. Improvement of the food supply sold during school breaks: remove/limit fat and sugar products sold and promote the sale of fruits and bread.
3. Health education actions to make adolescents aware of the concept of nutritional balance and steer their choice towards recommended products.
4. Raise awareness of parents to the importance of breakfast for their children and of limiting morning snacks: flyers and a conference.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=161> (European Commission Best Practice Portal)

Example: National model 'Child to Healthier Weight' (part of the JOGG programme)

One of the characteristics of Child to Healthier Weight is the close collaboration between professionals from both the care and social domains. One central care provider coordinates the counselling process and builds a relationship of trust with the child and the family. Together with other professionals, they are committed to improving not only the health of the child, but also the quality of life in the short and long term, by providing support in the field of education, debts or other psychosocial problems with the child and the family.

Source: <https://kindnaargezonderegewicht.nl/>

Example: Combined lifestyle intervention (GLI) programmes

An example of how a country-specific Health Insurance Act can play a role in creating healthier lifestyles are the Combined Lifestyle Interventions (CLIs or GLIs in Dutch) implemented in The Netherlands.

There are four recognised combined lifestyle intervention (CLI) programmes in the Netherlands for children: BeweegKuur, SLIMMER, Cool and Samen Sportief in Beweging. The CLI programmes are intended to ensure lasting behavioural change and a healthy lifestyle in the long term. A participant receives guidance from several specialists, such as a dietician, physiotherapist, lifestyle coach or remedial therapist. The focus is on movement, nutrition, and behavioural change, which should lead to better physical fitness, weight loss and better quality of life.

CLIs thus offer a sustainable approach to changing the lifestyles of people with obesity or overweight. Interventions that are registered as CLIs by the National Institute for Public Health and Environment (RIVM), effectively combine dietary and physical exercise advice. Moreover, health insurance companies cover the costs for participation in registered interventions when fulfilling the eligibility criteria, namely: insured people with a BMI above 25 and at high risk of cardiovascular disease and diabetes type 2 or insured people with a BMI above 30. Health insurance coverage makes it easier for high-risk groups to access these interventions. Overall, the success of CLIs is driven by an effective collaboration between public institutes who assess and register interventions, health providers who refer patients to the interventions and health insurance companies who contract intervention providers in partnership with municipalities.

Source: <https://www.rivm.nl/gecombineerde-leefstijlinterventie/programmas>

Health determinants area 7: Creating healthy environments

An intersectoral and integrated approach can promote healthier behaviours more effectively, tailoring health promotion and disease prevention interventions to living settings, such as communities, schools, workplaces and online/virtual environments¹⁹⁰.

- Promotion of networks in cities which promote the commitment of local entities to health and well-being in a comprehensive manner, in line with Phase VII of the European Network of Healthy Cities (WHO European Healthy Cities Network) and which could support the empowerment of local communities to make decisions that positively affect their health;
- Healthy urbanism: improving urban settings to encourage physical activity, emotional wellbeing, social living and reducing air and noise pollution through active mobility (walking and cycling), green infrastructure and tactic urbanism to reorganise public space share in favour of walking and cycling and at the expense of private motorised vehicles;
- Promotion of Networks of Health-Promoting Schools which encourage schools to include health and well-being within their educational project, conducting a situation analysis and a prioritisation of interventions to gain health and wellbeing, with the participation of the whole school community, in line with the Schools for Health in Europe Network;
- Increase of the resilience against climate change and its impact on health, as addressed by the Joint Action on Health Equity Europe;
- Capitalise on the 'green transition' to design and implement policies and initiatives that also generate greater health and equity.

Many policies and initiatives that restore the environment may also lead to better health (consumption of less meat, more fruits and vegetables, active travel, more green space, indoor thermal and air quality) and to greater equity, if this is taken into consideration in the design and implementation of initiatives. There is a clear window of opportunity to develop policies and interventions to achieve the European Green Deal.

Workplace conditions are also an important 'environmental' determinant of health, with evidence that inclusive organisations and workplaces that are 'purpose' driven to contribute to planetary health benefit the health of those who work there.

¹⁹⁰ https://www.salute.gov.it/imgs/C_17_notizie_5029_0_file.pdf

Diabetes

Diabetes area 1: Prevent the onset of type 2 diabetes among high-risk populations

Countries may consider implementing **national diabetes prevention plans** that include a host of policies (integrated, holistic approach) as well as specific interventions that target high-risk populations, including adults with overweight/obesity, metabolic syndrome or prediabetes and tobacco users.

For high-risk populations preventive strategies are needed that address clinical risk factors (high blood pressure, dyslipidaemia, raised blood sugar level) by targeted **lifestyle interventions** focusing on a modification of diet in combination with exercise and (if applicable) smoking cessation¹⁹¹. A combination of intensive diet change and exercise seems most promising in reducing the risk of type 2 diabetes among high-risk individuals¹⁹². **Combinations with medication** may be considered, also dependent on individual preferences and self-management abilities. Lifestyle modification interventions are usually delivered by primary care providers, including nurses, but could also be delivered by means of interprofessional collaboration, i.e., dietitians, coaches for physical activity and psychologists. Complementary (personalised) lifestyle advice and support for modification by digital tools can be helpful¹⁹³. Computerised alert systems could be considered to support primary care providers to detect high-risk patients for screening.

Furthermore, **community-based strategies** are needed to target people with an increased risk of developing type 2 diabetes who may not be sufficiently reached by other strategies. As mentioned in the section on integrated approaches, interventions should be tailored to people's healthy literacy level, information needs, preferences for educational and support and (digital) skills. Health-in-All-Policies and intersectoral approaches are likely to be most effective. This also includes addressing commercial and social determinants. For instance, **healthier food and drink environments** may require reformulation or regulation through taxes or restricting, such as the Sugar-Sweetened Beverage (SSB) Tax, which has been implemented in a number of countries¹⁹⁴.

Example: best practice DE-PLAN

DE-PLAN ("Diabetes in Europe – Prevention using Lifestyle, Physical Activity and Nutritional Intervention") is a large-scale diabetes prevention initiative, which aims to develop community-based type 2 diabetes prevention programmes for individuals at high risk across Europe. Led by the University of Helsinki, the project, implemented in 17 countries, aimed at developing and testing models of efficient identification and site-specific interventions of individuals at high risk of type 2 diabetes in the community. The whole European DE-PLAN study aimed at implementing a lifestyle intervention programme to prevent T2DM within the national healthcare system of each participating country and by tailoring activities to the specific "real-life" local setting.

Source: <http://chrodis.eu/good-practice/de-plan-study-greece-greece/>

Example: best practice diabetes prevention and screening in vulnerable populations of the Lisbon Metropolitan Area (Portugal)

¹⁹¹ Smokers are 30 to 40 percent more likely to develop type 2 diabetes than non-smokers:

<https://www.fda.gov/tobacco-products/health-effects-tobacco-use/cigarette-smoking-risk-factor-type-2-diabetes>

¹⁹² Madsen KS, Chi Y, Metzendorf MI, Richter B, Hemmingsen B. Metformin for prevention or delay of type 2 diabetes mellitus and its associated complications in persons at increased risk for the development of type 2 diabetes mellitus. Cochrane Database Syst Rev. 2019 Dec 3;12(12):CD008558. doi: 10.1002/14651858.CD008558.pub2.

¹⁹³ Wu X, Guo X, Zhang Z. The Efficacy of Mobile Phone Apps for Lifestyle Modification in Diabetes: Systematic Review and Meta-Analysis. JMIR Mhealth Uhealth. 2019 Jan 15;7(1):e12297. doi: 10.2196/12297.

¹⁹⁴ <https://www.worldobesity.org/resources/policy-dossiers/pd-1/case-studies>

This intervention was developed and implemented in collaboration with municipalities and local social partners. The main objectives were: to promote health in vulnerable communities in the Lisbon Metropolitan Area; to promote equity in access to healthcare; to implement diabetes prevention; to screen vulnerable populations for diabetes risk; to establish partnerships to consolidate the ability to act on vulnerable communities; and to contribute to the actions advocated by the Portuguese National Plan on Diabetes. Implemented activities included training sessions about diabetes prevention and management for healthcare and social care professionals, sessions about diabetes prevention and healthy lifestyles promotion for the adult population, and diabetes risk screening sessions, also for the general population. The fact that the service was free of charge and conducted through a mobile unit, going directly to the communities, was highly valued. The involvement of a national governmental agency (DGS) and the patient association (APDP) was a condition for success. More information: <http://www.fundacaoernestoroma.org/projetos/>

Source: Best practices CHRODIS+: Diabetes Prevention and Screening in Vulnerable Populations of the Metropolitan Lisbon Area - Portugal - CHRODIS

Diabetes area 2: Reduce undiagnosed diabetes by raising awareness, targeted screening of high-risk individuals or early detection approaches

It has been estimated that more than 20 million people aged 20 to 79 years in the European region of the International Diabetes Federation (60 countries) live with undiagnosed diabetes. Early detection of diabetes is important, as timely and adequate diabetes management could prevent or delay complications, co-morbidity, poor quality of life and premature death, as such contributing substantially to decrease the burden of diabetes for individuals, health systems and societies.

To reduce the number of citizens with undiagnosed diabetes, countries may consider **targeted campaigns to raise awareness** of the disease, symptoms and risk factors among both citizens and primary care professionals. Diabetes information should be easily accessible to all citizens, tailored to their information needs, health literacy level, (digital) skills and preferred communication channels. Basic diagnostics, such as blood glucose testing, should be available in primary care facilities. Blood glucose testing by community pharmacists may also be considered to identify high-risk patients who could then be referred to the primary care centre.

Furthermore, **targeted screening for type 2 diabetes** may be considered, in particular among adults with overweight, obesity, (symptoms of) metabolic syndrome and tobacco users. Targeted screening of people at high risk of developing diabetes or prediabetes may be **integrated with high blood pressure and hypercholesterolemia screening** within primary care. Selective screening for diabetes and prediabetes is also recommended for patients with established cardiovascular disease¹⁹⁵. To increase screening efforts and improve early detection of diabetes and other cardiovascular risk factors, countries may need to **strengthen primary care** through investment in relevant resources and expertise, and by mobilisation of different healthcare professionals. Primary care based screening for pre-symptomatic type 1 diabetes among children may also be considered^{196, 197}.

Furthermore, in many countries **screening for gestational diabetes** among pregnant women has been implemented based on guidelines WHO-2013, NICE-2015, ADA-2018, SOGC-2016, ES-

¹⁹⁵ Cosentino F, Grant PJ, Aboyans V, et al., ESC Scientific Document Group, 2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD: The Task Force for diabetes, pre-diabetes, and cardiovascular diseases of the European Society of Cardiology (ESC) and the European Association for the Study of Diabetes (EASD), *European Heart Journal*, Volume 41, Issue 2, 7 January 2020, Pages 255–323, <https://doi.org/10.1093/eurheartj/ehz486>

¹⁹⁶ Ziegler A-G, Kick K, Bonifacio E, et al.; for the Fr1da Study Group. Yield of a Public Health Screening of Children for Islet Autoantibodies in Bavaria, Germany. *JAMA* 2020; 323(4): 339-351. doi:10.1001/jama.2019.21565.

¹⁹⁷ Cost and Cost-effectiveness of Large-scale Screening for Type 1 Diabetes in Colorado. *Diabetes Care* 2020; Jul; 43(7): 1496-1503. doi: 10.2337/dc19-2003.

2013, FIGO-2015, USPSTF-2014, IADPSG2015 and ACOG-2018¹⁹⁸. These guidelines differ according to screening approaches and criteria for gestational diabetes, which results in various screening practices across and within EU countries. To improve the quality and outcomes of gestational screening, guidelines may need to be updated and aligned, and good practices could be exchanged.

Example: best practice 'The Diabetes Screening Palermo Study'

The Diabetes Screening Palermo Study evaluated the effectiveness of a screening strategy for type 2 diabetes mellitus. The proactive approach towards diabetes screening, based on the analysis of databases of general practitioners, facilitated the early diagnosis of type 2 diabetes and individuals with prediabetes.

Source: <https://www.easd.org/virtualmeeting/home.html#!resources/screening-strategies-for-early-diagnosis-of-undiagnosed-diabetes-and-other-disorders-of-glucose-metabolism-the-dsp-diabetes-screening-palermo-study>

Example: Halt2Diabetes, Flanders (Belgium)

Since 2019, HALT2Diabetes is set up in Flanders in collaboration with the Flemish Government. In HALT2Diabetes people with a high risk for type 2 diabetes and cardiovascular disease are identified and guided towards a healthy lifestyle. HALT2Diabetes applies an internationally validated two-step screening procedure, with the FINDRISC (Finnish Diabetes Risk Score) as a first step. People aged 45 to 75 years could complete the questionnaire online or get a paper-and-pencil version. People with a high FINDRISC score (≥ 12) are being referred to a general practitioner (GP) for cardiometabolic risk assessment according to a standardised protocol. The GP may then refer for lifestyle guidance depending on the patient's preference and risk profile. People with newly diagnosed diabetes are being guided based on the care standard for diabetes.

Source: Lampaert A, Buyse L, et al. HALT2Diabetes, An integrated type 2 diabetes and cardiovascular disease prevention strategy in Flanders, 2018. <https://www.diabetes.be/nl/preventie-en-sensibiliseren/halt2diabetes-voor-professionelen/wat-halt2diabetes>

Diabetes area 3: Prevent or delay complications by ensuring (access to) high-quality diabetes care

Diabetes, if not well managed, may cause a wide range of complications due to links to the cardiovascular system, such as micro- and macrovascular conditions, retinopathy, neuropathy and diabetic foot problems. These complications cause suffering of patients, increase the risk of premature death and is also a substantial burden for health systems' resources.

Timely and adequate management of diabetes could prevent or delay the occurrence of complications. Therefore, early diagnosis should be followed by **timely and high-quality diabetes management** by multidisciplinary teams. This includes monitoring of blood sugar level, regular screening for complications, such as diabetic retinopathy, diabetic foot, neuropathy, cardiac and renal conditions and tailored support of patients' self-management (see diabetes area 3a). Cardiovascular risk assessment and management could be offered as part of **cardiovascular preventive programmes**.

Combinations of behavioural lifestyle interventions and, if necessary, medication that target modifiable risk factors (blood glucose level, blood pressure, lipid, diet, alcohol consumption, physical activity and smoking, stress reduction and sleep disorders) have proven effective to control diabetes and reduce the risk of cardiovascular disease or other

¹⁹⁸ Li-zhen L, Yun X, Xiao-Dong Z, et al. Evaluation of guidelines on the screening and diagnosis of gestational diabetes mellitus: systematic review. *BMJ Open* 2019;9:e023014. doi:10.1136/bmjopen-2018-023014

complications¹⁹⁹. Resources for **structured, validated practice for lifestyle modification** are important, since improving diet and increasing physical activity are the first step of treatment of diabetes type 2^{200,201}. Countries may need to **strengthen primary care** through investment in relevant resources and expertise, and by setting up multidisciplinary teams.

Diabetes related health data, generated by **digitally enabled technologies** and used in **diabetes registries or diabetes information systems**, have the potential to improve care outcomes. They can help guiding the prevention and management of the disease, prevent complications, ensure quality of care, allow for identifying trends and research to be conducted, decrease health expenditure and inform policies²⁰². Measuring and comparing diabetes outcomes – and identifying the causes of variation – could help to identify areas where better outcomes and efficiency gains can be achieved. **Standardised outcome definitions and common methods of data collection** allow comparison across countries and may drive subsequent improvements. Currently, some EU countries have well-developed national diabetes registries or are developing such registries, others have dedicated registries for selected age categories or diabetes type, and other EU countries do not have national diabetes registries. In general, data registries need a formal governance structure, that includes the involvement of stakeholders, to ensure that patient data are properly handled and respect the law, individual rights, data protection and privacy. More specifically, data registries should be compliant with the General Data Protection Regulation (GDPR)²⁰³.

The WHO Europe and international partners have pointed to **inequalities in access to insulin products, diabetes medication and technologies for self-monitoring**, such as blood glucose meters and test strips, which is a significant threat to the health and wellbeing of many diabetes patients in Europe. Reducing inequalities in access and health outcomes may be supported by implementing an **EU-wide common digitisation/data framework** and more **transparency in medicines procurement**, including **fair pricing models**, review of **incentives and improvements in logistics**. Countries may also require support in **health technology assessment**.

The **COVID-19 pandemic** and linked restrictions have increased inequalities in access to effective diabetes medical care due to worsening of the financial situation of vulnerable diabetes populations, a decrease in diagnosis and access to medication, social disconnection, and disruptions in the production or delivery of insulin and other diabetes medication. Access to high-quality diabetes care and management should in particular be improved for disadvantaged groups and for those living through humanitarian emergencies.

Furthermore, **diabetes management in the context of the COVID-19 pandemic** needs more attention, as people with diabetes are at an increased risk of developing severe COVID-19,

¹⁹⁹ Yusufu M, Zhang X, Sun X, et al. How to perform better intervention to prevent and control diabetic retinopathy among patients with type 2 diabetes: A meta-analysis of randomized controlled trials. *Diabetes Res Clin Pract.* 2019 Oct;156:107834. doi: 10.1016/j.diabres.2019.107834. Epub 2019 Sep 21.

²⁰⁰ Inzucchi SE, et al. Management of hyperglycaemia in type 2 diabetes: a patient centered approach. Position statement of the American Diabetes Association (ADA) and the European Association for the Study of Diabetes. (EASD). *Diabetologia* 2012;55:1577-96

²⁰¹ The International Diabetes Federation evaluated the cost-effectiveness of a range of comprehensive lifestyle programmes, aimed at improving nutrition and physical activity <https://idf.org/e-library/epidemiology-research/diabetes-atlas/126-cost-effective-solutions-for-the-prevention-of-type-2-diabetes.html>

²⁰² Improving outcomes for people with diabetes: The role of health data, access to innovation and rethinking care. <https://efpia.eu/media/413307/improving-outcomes-for-people-with-diabetes.pdf>

²⁰³ <https://gdpr.eu/>

hospitalisation and dying from COVID-19²⁰⁴. Moreover, a recent study shows growing evidence of the risk of developing diabetes among patients with long COVID and a recommendation to integrate diabetes screening and management in post-acute COVID-19 care²⁰⁵.

Diabetes area 3a: support diabetes patients' empowerment and self-management

Empowering people with diabetes to make informed choices in health and minimise complications is key, and **self-management support** should therefore be a major element of diabetes care. The EU funded COMPAR-EU project (www.compar-eu) ranked the most effective and cost-effective self-management interventions for four conditions²⁰⁶, including diabetes. Results are expected to be published in 2022 and made available through a web-based platform. As a spin-off, a European research and innovation centre on patient empowerment and self-management will be created: Self-Management Europe (SME). This centre has the ambition to become a network of researchers, healthcare professionals, developers, industry and other stakeholders. The centre will provide practical tools to encourage and support healthcare professionals to implement self-management support in daily clinical practice, provide training courses on implementing approaches that support patients' self-management and empowerment, and share evidence, experiences and good practice.

Digital tools (e.g., web portals, telemedicine, digital services) could support patients' autonomy, self-management and strengthen empowerment. Many diabetes patients may benefit from **technology to self-monitor their blood glucose level, support lifestyle changes and medication adherence and/or self-administer insulin**. Whether self-monitoring or self-treatment through innovative technology is an option should be discussed and agreed upon by the main healthcare professional and the patient (or family member, in case of children) in a process of shared decision-making. Self-monitoring of blood glucose level can be done by finger-prick or by continuous glucose monitoring, either real-time or intermittently viewed. Continuous glucose monitoring is effective for type 1 diabetes. Moreover, blood glucose monitoring requires patient education and training. Substantive investment in patient education and training is also essential for patients who need to use insulin, either by injecting themselves or using an automated insulin pump.

Importantly, **quality and safety** of diabetes technology should be ensured and **inequalities in access be addressed**. EU countries could work on enabling or accelerating access to digital tools and agree on requirements, quality and eligibility criteria, in order to provide more coherence in the digital environment and to ensure high standards of quality. This process could benefit from a joint European coordination and from the level playing field for interoperability and data quality provided in the realm of the European Health Data Space.

²⁰⁴ Schlesinger S, Neuenschwander M, Lang A, et al. Risk phenotypes of diabetes and association with COVID-19 severity and death: a living systematic review and meta-analysis. *Diabetologia*. 2021;64(7):1480-1491. doi:10.1007/s00125-021-05458-8

²⁰⁵ Xie Y, Al-Aly Z. Risks and burdens of incident diabetes in long COVID: a cohort study. *The Lancet Diabetes & Endocrinology* 2022; March 21. DOI: [https://doi.org/10.1016/S2213-8587\(22\)00044-4](https://doi.org/10.1016/S2213-8587(22)00044-4)

²⁰⁶ Besides diabetes, these are COPD, heart failure and obesity.

Example: best practice 'Reverse Diabetes2 Now'

Reverse Diabetes2 Now is an intensive, multidisciplinary lifestyle treatment for people with diabetes type 2 developed by the Dutch foundation "Voeding Leeft". The treatment aims to: reverse diabetes progression, this means using less medication and/or having healthier blood glucose levels or achieving remission and improving quality of life. Participants are supported and empowered by providing knowledge and skills focusing on four pillars (nutrition, exercise, relaxation and sleep) to structurally adapt their dietary habits and general lifestyle. The lifestyle treatment consists of six intensive months, followed by an aftercare programme of 18 months. It is a group-based programme (approximately 20 participants) guided by a multidisciplinary support team, including a nurse practitioner, dietician, personal coach and programme coordinator. A medical team including experienced nurses, GPs and internal medicine specialists is available for medical support. A participant can choose to follow the programme online or participate in physical meetings with supplementary online support.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=366> (European Commission Best Practice Portal)

Example: best practice 'Disease Management Programme Therapie Aktiv'

Therapie Aktiv is a Disease Management Programme (DMP) for patients with diabetes mellitus type 2 in Austria. Type 2 diabetics get more intensive medical care as well as more knowledge about the disease. Regular check-ups (e.g., HbA1c, eyes and feet) and the corresponding annual documentation are part of the programme. At least once a year participating doctors help each patient to lay down measures for better dealing with the disease in daily life (setting of sensible and attainable lifestyle goals together with patients).

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/getfile.cfm?fileid=2>

Diabetes area 4: implement care models that integrate proactive diabetes management in person-centred care

Health systems need to identify people with diabetes early, understand their needs, organise their care pathway and empower them. Although those disease management programmes for diabetes, which have been widely implemented in EU countries in the 1990/2000s, have proven to be effective to improve clinical outcomes (e.g., blood glucose level)²⁰⁷, many lack a broader focus on what quality of care and important outcomes are from the perspective of people with diabetes. Moreover, because of their single-disease focus, these programmes may not always be effective among multimorbid populations. This is an important issue, as diabetes is very common among older people, of whom the great majority (estimates as high as >90%) have other long-term conditions besides diabetes. This is particularly relevant for the multi-risk association of type 2 diabetes, high blood pressure and hypercholesterolemia.

Countries are encouraged to implement innovative care models that adopt a **proactive** (prevention oriented) **person-centred, integrated care approach**. Building blocks to consider are strengthening primary care, a comprehensive approach for common risk factors, use of national diabetes registries and implementing Patient-Reported Outcome and Experience Measures (PROMs, PREMs) to monitor quality from the patient perspective. **Digital management systems and support tools** for healthcare professionals and patients enable person-centred management, as they facilitate care coordination and integration across disciplines and settings; overcome spatial inequalities in access to high quality, specialised health care resources, empower patients to have better control and ability to manage their condition, and provide personalised self-management support. The rights of the citizens to access and control their health data need to be significantly strengthened and standardised across countries to allow this. This is also supporting an efficient allocation of resources within constrained healthcare systems. To support the implementation of person-centred integrated care, countries may also consider **designing**

²⁰⁷ Pimouguet C, Le Goff M, Thiébaud R, Dartigues JF, Helmer C. Effectiveness of disease-management programs for improving diabetes care: a meta-analysis. *CMAJ*. 2011;183(2):E115-E127. doi:10.1503/cmaj.091786.

financing systems that facilitate interorganisational integration of care – including prevention and self-management support – and overcome care fragmentation.

Example: Health Outcomes Observatory (H2O) project

The Health Outcomes Observatory project (H2O) is a European partnership (Spain, Austria, Germany and Netherlands) between the public and private sectors under the framework of the Innovative Medicines Initiative, which aims to create a standardised data governance and infrastructure system across Europe to incorporate patients' experiences and preferences in decisions affecting their individual healthcare and those of the entire patient community. H2O covers three diseases areas, diabetes, inflammatory bowel disease and cancer. With H2O infrastructure and tools, patients are able to measure their outcomes in a standardised way, whilst keeping full control of their data. Ultimately, this framework of Observatories aims to foster innovation in healthcare in Europe and beyond to deliver better outcomes for all.

Source: <https://health-outcomes-observatory.eu/about/>

Example: Steno Diabetes Centers Denmark

The Novo Nordisk Foundation, in collaboration with Denmark's administrative regions, has taken the initiative to establish five outpatient specialist diabetes centres covering Denmark. The Steno Diabetes Centers are located in Aarhus, Copenhagen, North Denmark, Odense and Zealand. The centres are specialised multidisciplinary diabetes clinics that focus on the care goals of individual patients and offer high-quality care in user-friendly surroundings with good accessibility. The vision for the Steno Diabetes Centers is to establish a framework for reducing the number of people developing diabetes, while ensuring that people with diabetes live longer with an enhanced quality of life. In establishing the centres, the Foundation wants to improve the quality of diabetes treatment and the prevention of complications to benefit both individuals with diabetes and society. Core activities are: high-quality diabetes treatment and prevention of late complications; patient-oriented research; intersectoral collaboration and disease prevention; and training healthcare professionals and patient education.

Source: Steno: <https://steno.dk/en/>

Diabetes area 5: support people with diabetes and their families in living with diabetes

People with diabetes of all ages and their families **need access to services to help them living a good life with diabetes**. This includes support to improve or maintain their physical, mental and social wellbeing, to participate in society (e.g., school, work, leisure and social activities), and income protection.

Special attention is needed to support **children and adolescents with type 1 diabetes**. Although evidence of more mental health problems or a worse quality of life is inconclusive, psychosocial barriers to perform adequate self-management have been reported frequently for adolescents with type 1 diabetes^{208,209}. Countries may consider to develop policies that support the implementation of integrated intersectoral interventions that have proven effective to help children and adolescents with type 1 diabetes not only to self-manage their condition, but also to live a 'normal' life (attending school, participating in sports and social activities) as much as possible, comparable to their healthy peers.

Young adults with diabetes also need integrated intersectoral care, to be able to take informed decisions about reproductive health. They may also need support to facilitate access to professional or academic training and/or the labour market. It should be noted that nowadays type 2 diabetes is increasingly being diagnosed at younger age, which means that the population of citizens with **diabetes at working age** is increasing. Together with diabetes type 1 among

²⁰⁸ Martinez K, Frazer SF, Dempster M, Hamill A, Fleming H, McCorry NK. Psychological factors associated with diabetes self-management among adolescents with Type 1 diabetes: A systematic review. J Health Psychol. 2018 Nov;23(13):1749-1765. doi: 10.1177/1359105316669580. Epub 2016 Sep 22. PMID: 27663288.

²⁰⁹ Datye, Karishma A et al. "A review of adolescent adherence in type 1 diabetes and the untapped potential of diabetes providers to improve outcomes." *Current diabetes reports* vol. 15,8 (2015): 51. doi:10.1007/s11892-015-0621-6.

younger people, this causes a substantial loss of productivity and labour participation in countries where the workforce and social security is already under pressure because of ageing populations. Therefore, besides improving access to the labour market, effective strategies are needed to prevent early drop-out among adults with diabetes.

Diabetes area 6: increase awareness of the impact of diabetes for functioning and participation and fight stigmatisation of people with diabetes

Considering that diabetes is impacting the lives of millions of people living in the EU, it is important to **raise awareness of the impact of the disease** on people's lives and participation options among the general population, healthcare professionals, schools and training institutes, workplaces and communities. Moreover, people living with diabetes often experience stigma, resulting from a lack of awareness, and myths and misconceptions about the disease in their community. Therefore, raising awareness and **eradicating discrimination** are important priority areas to reduce the burden of diabetes for individuals and society.

To design and implement effective policy measures, interventions and good practices, **co-creation with people living with diabetes** is of key importance to generate value and impact.

Cardiovascular diseases

CVD area 1: Prevention of the onset and progress of cardiovascular diseases

A key priority in this area includes the implementation of effective population-wide interventions to prevent the onset and progress of cardiovascular diseases. Although countries and regions may have rather variable risk patterns for cardiovascular diseases and may therefore have different policy priorities, reducing tobacco/nicotine use and obesity and acting on hypertension, type 2 diabetes and psychosocial factors will contribute significantly to all countries and regions. Improving physical activity and diet (including taking in less calories and reducing harmful alcohol consumption) will also contribute to better health including better cardiovascular health and less cancer occurrence.

Cardiovascular disease often occurs suddenly and/or unexpectedly by myocardial infarctions or cerebral vascular accidents, and quick action is essential to save lives and prevent long-term sequelae (disabilities). Both the general public and people at high risk, patients and their families need to be educated, to **create awareness of symptoms and improve knowledge**²¹⁰ on how to act if such symptoms occur. Specific attention must be given to awareness tools designed to groups exposed to delay to care, including women and vulnerable populations. Community-based prevention strategies should specifically target these groups, as they may not be reached to the full extent by other strategies.

Strategies that make use of **community-based intervention** may be more effective than those targeting individuals only. It should be taken into account that many people of lower socioeconomic backgrounds may also face other health issues (e.g., mental health problems) and social challenges (income, housing). Strategies to reduce the risk and burden of cardiovascular diseases may therefore require additional social policies to be fully effective and are addressed in the health determinants strand.

Structured counselling and behavioural interventions for lifestyle modification should be part of care pathways for high-risk patients. Experimentation and dissemination of innovative

²¹⁰ 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice: Developed by the Task Force for cardiovascular disease prevention in clinical practice with representatives of the European Society of Cardiology and 12 medical societies With the special contribution of the European Association of Preventive Cardiology (EAPC). <https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/2021-ESC-Guidelines-on-cardiovascular-disease-prevention-in-clinical-practice>

health organisations are therefore a field of interest. For prevention of cardiovascular diseases for high-risk patients, structured resources are needed to address lifestyle factors, supporting individual healthy choices and behaviour change²¹¹. The target for 20*20*20 joint programming could be considered for hypertension and salt, aiming to, by 2025, increase by 20% the proportion of people who know they have hypertension and the proportion of eligible people receiving treatment, and reduce salt intake by 20%. Targets for regular physical activity may also be considered.

Secondary prevention approaches are critically important to reduce premature deaths from CVD. Secondary prevention strategies targeted toward known CVD risk factors are crucial to best support patients. This could include for instance follow-up consultations at GPs after events, including an assessment of all metabolic and lifestyle risk factors and a comprehensive guidance on how to treat risk factors^{212,213}.

Specifically for **stroke**, research evidence indicates that 90% of premature stroke may be preventable by changing modifiable risk factors with 75% of cases being preventable by improving behavioural factors such as smoking, poor diet or low levels of physical activity²¹⁴. In addition, there are several medical risk factors for stroke that contribute to its occurrence and progression. These include atrial fibrillation, diabetes mellitus, hypertension, and high levels of cholesterol. Especially unrecognised hypertension and atrial fibrillation are important with hypertension as the leading risk factor for stroke and responsible for nearly half of all ischemic strokes. Atrial fibrillation is related to 20–30% of cases. One approach to address these medical risk factors is by **improving monitoring and screening through communitywide, primary-care-led initiatives**²¹⁵. Countries may improve their outcomes by working to implement the recommendations of the European Society of Cardiology (ESC) next to focusing on the improvement of healthy living.

Example: Young 50

YOUNG50 is a project co-funded under the third Health Programme that transfers the Italian best practice CARDIO 50 project to Lithuania, Romania, Luxembourg among the 50 years old. It aims to estimate cardiovascular risk among the 50 years old population, identify persons with inadequate lifestyles, new cases of hypertension, hyperglycemia and hypercholesterolemia, activate an integrated model of assistance to help modify or reduce risk factors among healthy subjects, promote interventions to change unhealthy lifestyles and increase knowledge and perceptions of CVD risks among the general population.

The best practice implemented in Italy, comprising early detection, treatment of risk factors and follow up, got positive results for people who received counseling and improved their lifestyles or medical parameters.

Countries can take advantage of transfer and scaling-up of innovative prevention models, including the use of information and communication technology. Outcomes expected are synergy among prevention programs,

²¹¹ Lin J & al. Behavioral Counseling to Promote a Healthy Lifestyle in Persons With Cardiovascular Risk Factors: A Systematic Review for the U.S. Preventive Services Task Force Healthy Lifestyle. *Ann Intern Med.* 2014;161(8):568-578. doi:10.7326/M14-0130

²¹² Ray KK. DA VINCI study. EU-Wide Cross-Sectional Observational Study of Lipid-Modifying Therapy Use in Secondary and Primary Care: the DA VINCI study. *Eur J Prev Cardiol.* 2021 Sep 20;28(11):1279-1289

²¹³ Gavina C et al. Cardiovascular risk profile in Portugal: evidence from a large population-based cohort. *Eur Heart J*, Volume 42, Issue Supplement_1, October 2021, ehab724.2480

²¹⁴ Feigin VL, Roth GA, Naghavi M, et al; Global Burden of Diseases, Injuries and Risk Factors Study 2013 and Stroke Experts Writing Group. Global burden of stroke and risk factors in 188 countries, during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet Neurol.* 2016;15(9):913–924.

²¹⁵ Karnad A, Pannelay A, Boshnak A, Cook R. Stroke prevention in Europe: how are 11 European countries progressing toward the European Society of Cardiology (ESC) recommendations. *Risk Management and Healthcare policy.* 2018;11; 117-125.

inclusion of CVD prevention in Regional or National Health Plans, development of recommendations and Policy Guidelines.

Source: Health Programme DataBase – European Commission (europa.eu)

CVD area 2: Early detection of cardiovascular diseases

In addition to health promotion and primary prevention of cardiovascular diseases, it is important that resources for early detection are in place. Healthcare systems need to be designed to optimise early detection, for instance by a **prevention-oriented primary care system**. Physicians and other primary care providers are in the position to recognise and act on CVD risk factors at an early stage.

While it is debatable whether population-level screening will result in lower morbidity and mortality of cardiovascular diseases²¹⁶, it is likely that **programmatic screening of specific groups** should be considered. In its 2020 update on CVD, the GBD flagged the need to address risk factors as an important initial opportunity to reduce disparities in parallel with broader effort targeting social determinants of health²¹⁷. Strengthening cardiometabolic/other NCD risk stratification and management approaches that also enable the inclusion of hard-to-reach groups. First of all, strategies aiming at populations with low socio-economic status to improve cardiovascular risk factors detection, as well as type 2 diabetes. Comprehensive tools for cardiovascular risk estimation (metabolic and lifestyle determinants) may be developed to improve the accuracy of CV risk assessment (AMI and stroke) in European populations, among women and men. A yearly heart health check at the primary care level could be a way of programmatic screening.

Informed consent is required for any use of screening, provided that the criteria for appraising the validity of a screening programme are met²¹⁸. Targeted strategies may be experimented for specific situations. For instance, screening to identify serious congenital heart defects can provide early indications for life saving surgery and other forms of care and support. Echocardiography together with physical examination is important for prognostic stratification and patient follow-up. Another example is the early diagnosis of critical congenital heart defects by pulse oximetry screening in newborns.

Some population groups have higher genetic risks of cardiovascular disease(s) and/or diabetes, which may require screening or regular medical follow-up of genetically burdened families. Screening for familial hypercholesterolemia (in children) can be introduced to identify people at high risk early but should be accompanied with the availability of certain medicines (ideally at low cost).

Early detection of CVD could also be improved by investing on a regional or national level in **comprehensive multidisciplinary early detection training programmes** for reskilling healthcare professionals, especially within primary care and amongst specialist nurses. This could avoid misdiagnoses. A better understanding of risk factors and predisposition, and using evidence-based biomarkers and diagnostic tools, can identify patients at risk of developing CVDs before the onset of disease or delaying complications arising from them. Furthermore, improved adherence to the current scientific treatment guidelines would accelerate the delivery of innovative solutions to patients. Healthcare professionals need comprehensive guidance ensuring implementation of discharge and follow-up protocols. Discharge protocols should include the assessment of all four metabolic risk factors again after an event.

²¹⁶ Eriksen C U, Rotar O, Toft U, Jorgensen T. What is the effectiveness of systematic population-level screening programmes for reducing the burden of cardiovascular diseases? (2021). WHO. Health Evidence synthesis report 71. Copenhagen, 2021.

²¹⁷ Roth GA, et al. Global Burden of Cardiovascular Diseases Writing Group. Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. J Am Coll Cardiol. 2020 Dec 22;76(25):2982-3021

²¹⁸ WHO Europe – Screening programmes: a short guide – 2020

Digital tools may be beneficial for early detection of CVD and for monitoring heart failure patients, such as mobile health apps that monitor heart rhythm, weight and blood pressure^{219,220}. Furthermore, **medical technology innovations**, such as in vitro diagnostic medical tests (IVDs), digital stethoscopes or echocardiography, can play an important role in facilitating early detection and ensuring timely access to treatment where needed. However, access to echocardiography testing is not sufficiently widespread across Europe, as it requires the appropriate equipment and qualified sonographers. This has resulted in some European countries experiencing a shortage of people with sonography skills in the healthcare workforce.

A specific age-related type of CVD is **Structural Heart Diseases**, which cannot be prevented as such through lifestyle measures, making suggestions to improve the early detection of this specific condition, as well as its treatment and management a specific priority area.

Example: best practice 'Telehealth service for patients with advanced heart failure'

This practice introduced specific remote monitoring of patients with congestive heart failure, structural damage of myocardium and left chamber dysfunction through the deployment of telehealth services. This aim is to detect as many patients with the given diagnoses as possible, deploy telehealth services for monitoring and improved treatment of these patients. The service provides telemonitoring with a clinical protocol that is in line with the protocol used in the EU Unite4Health project (www.united4health.eu). The practice adapted this generic protocol for the specific target group of patients and the regional context.

Source: <https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=127>; SCIROCCO – Scirocco – Scaling Integrated Care in Context (scirocco-project.eu) (European Commission Best Practice Portal)

CVD area 3: Improving (access to) high-quality CVD care and self-management support

An overarching priority would be to promote innovation in CVD management by modernising the regulatory framework for the assessment of new treatments, establish collaborations in the research and innovation area and to use routinely recorded health data to obtain a better understanding of areas for improvement in patients' care pathways.

In addition, as patients with cardiovascular diseases often have comorbidities, the management of cardiovascular diseases cannot be seen as disjoint from these comorbidities. Care and disease management approaches should therefore be **integrated and personalised. Personalised or stratified medicine**²²¹ in which new diagnostic technologies, molecular biology, data and real time monitoring is promising to better target therapies and thereby improve health, social outcomes and cost efficiency. The potential of this can only be realised by integrating biological data into holistic disease models that reflect the complex clinical phenotypes seen in patients. This is particularly the case for people with genetic diseases of the heart and blood vessels who characteristically have diverse and evolving phenotypes throughout their life-course but is also relevant for common CVD associated with polygenetic risk variables.

Patients with cardiovascular diseases should have access to high-quality treatment and care, including **self-management education and support**. The alignment and coordination of care (primary care, hospital care, acute care services) is essential to save lives and prevent long-term disabilities in the case of an acute event. Implementing **integrated care pathways** and reducing any waiting times throughout the care pathway is essential for high-quality cardiovascular disease

²¹⁹ Kauw D, Koole MAC, Winter MM, Dohmen DAJ, Tulevski II, Blok S, Somsen GA, Schijven MP, Vriend JWJ, Robbers-Visser D, Mulder BJM, Bouma BJ, Schuurin MJ. Advantages of mobile health in the management of adult patients with congenital heart disease. *Int J Med Inform.* 2019 Dec;132:104011. doi: 10.1016/j.ijmedinf.2019.104011. Epub 2019 Oct 15. PMID: 31654966.

²²⁰ Conversely any negative aspects resulting from their deployment should be mitigated.

²²¹ Tada et al. Personalized medicine for cardiovascular diseases. *J Hum Genet* 66, 67–74 (2021). <https://doi.org/10.1038/s10038-020-0818-7>

management. Offering integrated and comprehensive care is also important given the fact that many CVD patients have co-morbidities.

Furthermore, **timely and adequate comprehensive rehabilitation** is important for optimal recovery. Educating and supporting patients and families to adopt a healthy lifestyle and teaching them what care is needed, is an important element of this rehabilitation. Ensuring equal access to and uptake of comprehensive rehabilitation is very important. Furthermore, **peer support** is a way of offering rehabilitation, as is offered in the Finnish Tulppa outpatient rehabilitation programme²²².

More **personalised lifestyle interventions**, enhancing **quality of life** of CVD patients, should be supported by wider action meant to provide healthier living and working environments that make the healthy choice the easy choice. Specific and focused action will be needed for special groups, such children, adults with a lower socioeconomic position, minority groups and people in special settings (e.g., refugee camps, prisons).

New digital technologies and stakeholder involvement can also be part of innovative, effective strategies to improve lifestyles. However, the risk of exclusion of those with poor digital skills, thereby increasing social health inequalities, must be mitigated.

Effective measures to improve CVD care and CVD outcome require robust data on disease prevalence, implementation of preventive, diagnostic and therapeutic strategies as well as on quality of care and social variables. **Better (re-)use of data** will help in the development of innovative treatments. Positive competition should be endorsed through increased transparency around the health status of CVD patients in individual countries. The European Society of Cardiology (ESC) and the European Heart Network (EHN) have published a blueprint for European action and call for the use of digital innovation, the establishment of region-wide **registries**, the development of a research agenda, and emphasising a population health approach that incorporates primary and secondary prevention, and best practice sharing to identify and target people at risk for CVD and those with CVD to drive towards better outcomes²²³. The advantages of continuous registries aiming to support continuous quality improvement at the hospital and country level have been demonstrated by the Swedish, and more recently, UK models. Continuous data collection and provision can substantially improve quality of care, resulting in improved outcomes. There is a need for CVD registries to be coordinated and expanded at European level, in order to inform evidence-based decision-making throughout the disease pathway – in linkage with the European Health Data Space. CVD registries should be compliant to the General Data Protection Regulation (GDPR)²²⁴.

Innovation, including **collaboration between public and private entities**²²⁵, needs to be fostered to address the burden of CVD, overcome treatment bottlenecks, and positively influence population health. **Pharmaceutical innovation** has a role to play in addressing unmet medical needs and in improving outcomes for CVD patients. This requires strong and stable incentives for innovation in Europe. In highly innovative fields such as cell and gene therapies (CGT), collaboration between start-ups, academia, hospital providers and established companies is key to find and translate new treatment opportunities. Precision Medicine and CGT may be future possibilities to treat CVD even more effectively.

As cardiovascular diseases are amongst the most common causes of death in European countries, it is important to have high quality **end-of-life care** in place.

²²² <https://www.centerwatch.com/clinical-trials/listings/192709/coronary-heart-disease-cardiovascular-rehabilitation--effectiveness/>

²²³ Fighting cardiovascular disease—a blueprint for European Action. European Society of Cardiology 2020

²²⁴ <https://gdpr.eu/>

²²⁵ Towards a more resilient Europe post-coronavirus: options to enhance the EU's resilience to structural risks. EPRS April 2021

Example: WHO Best buys

Provide drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total-risk approach) and counselling for individuals who have had a heart attack or stroke and for persons with high risk ($\geq 30\%$) of a fatal or non-fatal cardiovascular event in the next 10 years.

Source: World Health Organization. Saving lives, spending less: the case for investing in noncommunicable diseases. December 2021. <https://apps.who.int/iris/rest/bitstreams/1399949/retrieve>

Chronic respiratory diseases

CRD area 1: Prevention of the onset and progress of chronic respiratory diseases

Policy options and actions to prevent the onset of chronic respiratory diseases, in particular chronic obstructive pulmonary disease (COPD), may link to:

- The prevention of smoking tobacco;
- The prevention of exposure to second-hand tobacco smoke;
- The prevention of exposure to occupational chemicals and dust;
- A reduction of indoor and outdoor pollutants;
- Prevention of infectious diseases that may cause CRD, such as tuberculosis and COVID-19;
- Vaccination programmes and improved adherence to vaccination programmes;
- Tackling childhood chronic allergy and airways disease.

Possible actions to prevent smoking tobacco and the exposure to second-hand tobacco smoke, are described in more detail under the health determinants strand. The best way to prevent COPD and other CRDs is to prevent people from starting to smoke. In addition, smoking cessation is a key area for intervention to prevent further progress of CRD.

Secondary prevention of asthma and COPD may focus on healthy diet and physical activity and for asthma also on the identification and control of allergies. It may also focus on the prevention of the worsening of symptoms (such as an exacerbation) that would increase the burden of the disease for patients.

Furthermore, new technologies and diagnostic techniques, could help to identify the peaks of incidence of different infectious pathologies so that prevention strategies can be put in place.

CRD area 2: Early detection of chronic respiratory diseases

An effective strategy to detect CRD in an early stage that could be considered, is opportunistic case finding in primary care by the use of spirometry, based on the presence of risk factors (age and smoking) and symptoms. The early detection of CRDs could optimise the opportunities to prevent worsening of the disease. With respect to COPD, it remains underdiagnosed and a reason for this is underuse of spirometry. Spirometry is accepted as the diagnostic test to assess airflow obstruction and classify severity of disease. The presence of symptoms is not a reliable indicator of disease and diagnosis is often delayed until more severe airflow obstruction is present. **Early diagnosis based on spirometry** allows risk factors for COPD, such as smoking, to be addressed in a timely manner and for treatment to be optimised. Research indicates that spirometry can also function as a motivational tool for persons to increase smoking cessation.

CRD area 3: Ensuring (access to) high-quality CRD care and self-management support

Chronic respiratory diseases are not curable. However, various forms of treatment and management could prevent exacerbations, help control symptoms and increase the quality of life of people living with a chronic respiratory disease.

Important issues to consider to better manage chronic respiratory diseases include:

- Raising awareness and educating healthcare professionals, patients and communities. Patient education could be supported through e-learning and peer-support groups.
- Improving availability, affordability and appropriate use of diagnostics and (non-)pharmacological therapies²²⁶. Basic tele-health and more advanced tele-monitoring using digital tools and devices to measure lung function and allergenicity should be considered.
- Smoking cessation, vaccination, pharmacological therapy, pharmacological and non-pharmacological rehabilitation, education and self-management are key areas to address in interventions²²⁷.

Tailored person-centred care, considering the skills of persons as well as the presence of any other conditions (multimorbidity) should also be a priority.

Chronic respiratory diseases, such as chronic obstructive pulmonary disease (COPD), often coexist with other long-term conditions that may impact the prognosis²²⁸. Some co-existing conditions arise independently of COPD, whereas others are causally related, either with shared risk factors or by one disease increasing the risk or compounding the severity of the other.

Management of chronic respiratory diseases should therefore include identification and adequate treatment of co-existing conditions, to reduce the burden of COPD in terms of morbidity, hospitalisation and healthcare costs²²⁹. This requires a person-centred integrated care approach. For potentially successful actions, see also the section on transversal aspects.

Furthermore, the diagnosis of any extrapulmonary manifestations of chronic respiratory diseases is important, as this can reflect treatable traits. Addressing these traits allows for symptom relief and lowering of the individual burden of disease.

Mental health and neurological disorders

Defining mental health and well-being, mental disorders and mental health problems²³⁰

The terms **mental health and mental well-being** in this section draw on the WHO definition of positive mental health, which emphasises the positive dimension that “mental health is a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO, 2001).

Mental illness is the loss of mental health due to a mental disorder. **Mental disorders** are defined as those reaching the clinical threshold of a diagnosis according to psychiatric classification systems including disorders such as depression, anxiety, bipolar disorder and schizophrenia. In this section, mental disorders will generally comprise all those included in Chapter 5 of the International Classification of Diseases (ICD-10) on mental and behavioural disorders with the exception of dementia (which is considered, along with Alzheimer’s disease, the main form of dementia, as a neurological disorder).

The broader term **mental health problems** is used to refer to mental disorders but also includes psychological distress, i.e., symptoms or conditions that do not reach the clinical threshold of a

²²⁶ Rossaki FM, Hurst JR, van Gemert F, et al. Strategies for the prevention, diagnosis and treatment of COPD in low- and middle- income countries: the importance of primary care. *Expert Rev Respir Med*. 2021 Dec;15(12):1563-1577. doi: 10.1080/17476348.2021.1985762. Epub 2021 Oct 12. PMID: 34595990.

²²⁷ https://goldcopd.org/wp-content/uploads/2020/11/GOLD-REPORT-2021-v1.1-25Nov20_WMV.pdf

²²⁸ Soriano JB, Visick GT, Muellerova H, et al. Patterns of comorbidities in newly diagnosed COPD and asthma in primary care. *Chest*. 2005 Oct;128(4):2099-107. doi: 10.1378/chest.128.4.2099. PMID: 16236861

²²⁹ Cavaillès A, Brinchault-Rabin G, Dixmier A, et al. Comorbidities of COPD. *Eur Respir Rev*. 2013 Dec;22(130):454-75. doi: 10.1183/09059180.00008612. PMID: 24293462

²³⁰ OECD/EU (2018), *Health at a Glance: Europe 2018: State of Health in the EU Cycle*, OECD Publishing, Paris. https://doi.org/10.1787/health_glance_eur-2018-en

diagnosis within the classification systems, but which can account for significant suffering and hardship, and can be enduring and disabling.

Priority area 1: Supporting favourable conditions for mental health and increasing resilience, and implementing mental health-in-all policies

Policies that tackle poverty, support job security, or encourage life-long learning are not aimed at improving mental health as such, yet they do create favourable conditions for mental health and well-being. Acknowledging the contribution these policies make to overall mental health, can open up opportunities for more targeted 'upstream' preventive action and initiatives. Programmes to protect children's rights or living conditions, for instance, do help prepare the ground for mental wellbeing.

Intersectoral action is an important element in the framework for action put forward by UNICEF to tackle the mental health of children and young people in light of the COVID-19 pandemic²³¹. This underlines the need to strengthen the capacity of education, social protection and other workforces (in addition to health that of the health workforce), and to support families, schools, and communities.

Mental health-in-all-policies was already a key topic of the first EU Joint Action on Mental Health and Well-being, resulting in four policy briefs including mental health in education, labour, local authority and whole-of-government policies, and recommendations for action as well as an overview of good practices to take forward at different government levels²³².

In 2015, the OECD Health Council adopted a Recommendation on Integrated Mental Health, Skills and Work Policy, which recommends countries to follow a mental health-in-all-policies approach by implementing policies across four thematic areas: 1) health systems should improve timely and appropriate access to mental health care services, and ensure primary care professionals are trained in mental health, 2) education and youth systems should coordinate and provide timely access to mental health support for children and adolescents delivered through schools, invest in the prevention of early school drop-out of adolescents with mental health problems, and provide continuous support to young people experiencing mental health problems in the transition from school to higher education or work, and from childhood to adulthood; 3) workplaces should develop policies to promote good mental health at work²³³ by increasing the awareness and competencies of line managers, and support employees with mental health problems in their return to work; and 4) welfare systems and social protection systems need to be better equipped and responsive to the needs of people with mental health problems, by training caseworkers to better understand mental health problems and integrate mental health care and support into the delivery of employment services²³⁴.

In June 2021, European Commission adopted its Communication on the EU strategic framework on health and safety at work 2021-2027²³⁵. It includes measures in the area of mental health at work. In collaboration with EU countries and social partners, the European Commission will for instance prepare a non-legislative EU-level initiative related to mental health at work that

²³¹ <https://www.unicef.org/media/108121/file/SOWC-2021-Europe-regional-brief.pdf>

²³² https://ec.europa.eu/health/sites/default/files/mental_health/docs/2017_mh_allpolicies_en.pdf

²³³ According to the Framework Directive on safety and health of workers at work (Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work, OJ L 183, 29.6.1989, p. 1–8), the identification and assessment of risks in both physical and psychosocial working environments is the starting point for managing occupational safety and health.

²³⁴ OECD, 2022. Recommendation of the Council on Integrated Mental Health, Skills, and Work Policy. OECD/LEGAL/0420. OECD Legal Instruments

²³⁵ Commission Communication "EU strategic framework on health and safety at work 2021-2027- Occupational safety and health in a changing world of work" COM(2021) 323 final

assesses emerging issues related to workers' mental health and puts forward guidance for action. In particular, European Agency for Safety and Health at Work (EU-OSHA) will carry out in-depth comparative research on the overall situation related to psychosocial risks and workers' mental health in European workplaces. The research will allow the policymakers to have a better understanding of the potential impact of different policies and the key success factors.

The OECD 2021 report on the implementation of this Recommendation noted that many countries had indeed developed national mental health plans with a focus on mental health policies integrated with education, employment, health and social policies, but that further progress is needed in the implementation of these plans and the enforcement of legislation at the working level. There are still structural barriers that hamper breaking down the policy silos. Progress made is uneven across the four thematic areas, with least progress being made in integrated practices in welfare and social protection policies²³⁶.

Under the Healthier Together Initiative, EU countries may consider to (further) develop and implement mental health-in-all-policies, learning from examples implemented in other countries, and/or initiate further steps to expand existing mechanisms and approaches, for instance by strengthening intersectoral cooperation, joint budgeting, or mental health equity monitoring.

Priority area 2: Promoting mental well-being and preventing mental disorders

An important area of work centres on the promotion of mental well-being and the prevention of mental disorders. These efforts can also cover the prevention of suicide. Promotion of mental well-being and prevention interventions can reduce risk factors for mental disorders, enhance protective factors for good mental and physical health, and lead to lasting positive effects on a range of educational, social and economic outcomes.

The median age of onset for any mental disorder is 14 years (for anxiety and personality disorders this is 11 years²³⁷, for major depression it is 31 years²³⁸). As such, it pays off to promote mental health and wellbeing, directed at developing social and emotional skills, in early childhood, but continuing at all ages is crucial. In addition, early interventions at the first onset of mental health problems can significantly improve outcomes²³⁹. School-based programmes are generally effective in reaching large numbers of young people with mental health promotion and prevention interventions, but also for the early detection of mental health problems (e.g., through a school counsellor).

There is evidence that more generic lifestyle-related measures such as increased physical activity²⁴⁰, a healthy and balanced diet²⁴¹, and healthy sleeping patterns²⁴² also have a positive impact on mental health, in adults and children.

²³⁶ OECD, 2021. Report on the implementation of the OECD Recommendation on Integrated Mental Health, Skills and Work Policy. pdf (oecd.org)

²³⁷ Focus-on-Health-Making-Mental-Health-Count.pdf (oecd.org)

²³⁸ Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies | Molecular Psychiatry (nature.com)

²³⁹ Preventive psychiatry: a blueprint for improving the mental health of young people (nih.gov)

²⁴⁰ Ayllon et al., 2019. Role of Physical Activity and Sedentary Behavior in the Mental Health of Preschoolers, Children and Adolescents: A Systematic Review and Meta-Analysis. *Sports Med.* Sep;49(9): 1383-1410 doi: 10.1007/s40279-019-01099-5.

²⁴¹ Głąbska, Guzek, Groele & Gutkowska, 2020. Fruit and Vegetable Intake and Mental Health in Adults: A Systematic Review. *Nutrition* 1;12(1):115 doi: 10.3390/nu12010115.

²⁴² Hugues Sampasa-Kanyinga et al., 2020. Combinations of physical activity, sedentary time, and sleep duration and their associations with depressive symptoms and other mental health problems in children and adolescents: a systematic review. *Int J Behav Nutr Phys Act* 5;17(1):72. doi: 10.1186/s12966-020-00976-x.

Economic evidence on mental health promotion and prevention interventions and investment is strongest in maternal and infant health, programmes focusing on children and adolescents, interventions in the workplace, and the prevention of suicide and self-harm²⁴³. Efforts in the area of suicide prevention can include multi-level national suicide prevention programmes, such as the one being implemented via the Joint Action ImpleMENTAL that started in October 2021²⁴⁴, national helplines, or prevention of self-harm repetition.

Areas where the economic evidence for action has been identified most clearly²⁴⁵ are:

- Maternal and infant mental health, for instance through early child development services or supportive parenting programmes;
- Children and adolescents, for instance through social and emotional learning as an integrated part of education;
- Mental health in the workplace;
- Interventions to prevent suicide and self-harm;
- Loneliness and depression in older people.

Other action areas where the evidence for mental health promotion interventions is strong²⁴⁶:

- Community empowerment programmes;
- Mental health promotion within health services (including primary care);
- through a focus on service users' mental health and wellbeing as part of routine primary health care and mental health services;
- Enhancing public awareness, promoting positive mental health and reducing stigma associated with mental ill health;
- Adopting a mental health-in-all-policies approach.

Mental health promotion and prevention activities can be carried out in a range of settings outside the health sector (such as education or employment) and under responsibility of those sectors. Increasing awareness of the potential and role of mental health promotion and prevention in such sectors is imperative for a successful public health response.

A wide range of practice examples can be found on the European Commission's Best Practice Portal. This includes best practices that were already selected for implementation²⁴⁷, and that are in the process of being rolled out (or for which the implementation is foreseen):

- A step-wise intervention programme to tackle depression, via the 'European Alliance Against Depression-Best' project²⁴⁸, work started in April 2021;
- Best practices to tackle mental health challenges as a consequence of the COVID-19 pandemic: a call for projects in support of implementation under the 2021 EU4Health Annual Work Programme closed in January 2022 and is currently under evaluation;
- Practices aiming to improve the mental health of vulnerable groups including young people, supported via the 2022 annual EU4Health Work Programme (call for proposals launched on 22 February 2022).

²⁴³ <https://www.annualreviews.org/doi/full/10.1146/annurev-publhealth-040617-013629>

²⁴⁴ Health Programme DataBase - European Commission (europa.eu)

²⁴⁵ The Economic Case for the Prevention of Mental Illness (annualreviews.org)

²⁴⁶ IUHPE_Mental-Health_PositionStatement.pdf

²⁴⁷ By the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases

²⁴⁸ Health Programme DataBase - European Commission (europa.eu)

The European Commission's Health Promotion and Disease Prevention Knowledge Gateway provides an overview of more detailed policy recommendations and practices to tackle depression in adults²⁴⁹, as well as children and adolescents²⁵⁰. Promising practices to tackle the mental health impact of the COVID-19 pandemic were also presented at the high-level conference on that theme, hosted by Commissioner Kyriakides in May 2021²⁵¹.

Innovative population-oriented prevention interventions are expected to emerge from the outcomes of research projects²⁵² funded under the Horizon 2020 Programme. These aim to promote mental health and well-being of young people (under the age of 25), increase resilience and mitigate the impact of biological, psychosocial and environmental risk factors. Two of these projects already delivered implementable research results, piloting a holistic inclusive intervention for a whole school environment, respectively strengthening the mental health and the well-being of young informal carers.

Priority area 3: Improving timely and equitable access to high quality mental health services

Mental health services are not widely available throughout the EU, with large differences within and between countries. The limited availability of health care services and professionals result in long waiting times for diagnosis and treatment, which negatively impact mental and physical health outcomes and related healthcare expenditures as well as participation in society, including labour participation.

Access to mental health care may also be restricted for large groups of citizens in a less favourable socioeconomic position, because of high co-payments, which contributes to increased health inequalities, and a larger burden of NCDs among vulnerable populations. Moreover, some people are more vulnerable than others – with risk factors including poverty, loneliness, unemployment, and pre-existing mental health problems. By way of prioritisation, services should target demographics with the most unmet needs along the social gradient by ensuring that such services can be accessed in an equitable and affordable manner.

Availability and access to high-quality mental health care is therefore an important priority area in this strand. Actions in this area include those that support access to the full spectrum of mental health promotion, prevention, treatment and rehabilitation services, in community and in-patient settings. With adequate reimbursement incentives, the provision of services in mental health can benefit from using digital means, including online delivery and innovative forms of monitoring and therapies, especially to meet the accessibility demands of younger or isolated citizens. This can be supported under the European Commission's social policy portfolio but also via support to health system reform, as well as via country-specific support actions. It would also include efforts to strengthen the health workforce, for instance via capacity building and training. The WHO Quality Rights Toolkit, which focuses on improving the quality and human rights of mental health and social care facilities, is a valuable reference in this context²⁵³.

Best practice implementation that is already ongoing, includes:

- The implementation of a Belgian best practice example (or elements thereof, adapted to local contexts) focusing on strengthening client-centred community-based services in

²⁴⁹ https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/depression-adults_en

²⁵⁰ https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/depression-children-adolescents_en

²⁵¹ https://ec.europa.eu/health/sites/health/files/non_communicable_diseases/docs/ev_20210510_promising-approaches_en.pdf

²⁵²

<https://cordis.europa.eu/search/en?q=contenttype%3D%27project%27%20AND%20programme%2Fcode%3D%27SC1-PM-07-2017%27&srt=%2Fproject%2FcontentUpdateDate:decreasing>

²⁵³ <https://www.who.int/publications/i/item/9789241548410>

countries participating in the Joint Action ImpleMENTAL²⁵⁴. Countries may consider to further implement policies to promote community-based services in line with the transfer of the Belgian best practice, and build person-centred community-based networks across sectors and disciplines, to improve the continuity and quality of population-based, needs-oriented mental healthcare;

- Special emphasis on mental health care for children and adolescents: measures to improve access, to increase the availability of specialised professionals;
- Special emphasis on mental health of and mental health care for older people: prevention and identification of depression at primary care level, suicide prevention;
- Targeting mental health services for inmates.

Priority area 4: Protecting rights, enhancing social inclusion, and tackling stigma associated with mental health problems

In seeking to support that people with mental health disorders can live their lives as fully as possible, improving understanding and awareness of mental health problems among the general population is crucial²⁵⁵. Creation of awareness should go hand-in-hand with tackling stigma associated with mental health problems, as stigma and discrimination increase social isolation and exclusion of people with mental health problems and their families, and create barriers for seeking help (from healthcare professionals in general and mental health and social services, but also from teachers, employers, etc.) and hinder access to the labour market. The availability of online professional services in mental health can significantly lower the thresholds, including cultural ones, to delivering high-quality interventions to citizens in need.

Many countries in the EU have introduced national awareness campaigns, but continuous awareness raising campaigns remain important, and specific campaigns targeting vulnerable populations, such as youth or the elderly, may be needed. Awareness of mental health problems should also be improved among teachers, line managers in workplaces, the media, primary care professionals and other professionals to strengthen mental health resilience and detect mental health problems at an early stage.

Courses that increase mental health literacy among the general population, such as Mental Health First Aid (MHFA) training (see example below), could be further promoted and made accessible to citizens and professionals, e.g., through workplace training. In addition, awareness raising and media training on how to report on mental health issues in the media can contribute to raising awareness among the general population and to tackle stigma associated with mental health problems.

Example: Mental Health First Aid training course

Initially developed in Australia in 2000, the Mental Health First Aid (MHFA) course addresses mental health problems by increasing mental health literacy among the general population as well as in more targeted settings like the workplace. The training equips participants with the skills to provide initial help to people experiencing a mental health crisis and to support people that experience ongoing mental health problems by focusing on five steps:

- 1: Assess risk of suicide and harm,
2. Listen non-judgmentally,
3. Give reassurance and information,
4. Encourage persons to get appropriate professional help, and
5. Encourage self-help strategies.

²⁵⁴ Health Programme DataBase - European Commission (europa.eu)

²⁵⁵ OECD, 2021. Report on the implementation of the OECD Recommendation on Integrated Mental Health, Skills and Work Policy. pdf (oecd.org)

Using a Delphi approach, separate guidelines have been developed for different types of mental health problems and for different settings. The evidence base for the effectiveness of MHFA is growing, and numerous European countries have adopted the approach and joined the global movement.

Source: <https://mhfainternational.org/international-mental-health-first-aid-programs/>

Another important area of work addresses the social inclusion of people living with a mental health problem or disorder, and the protection of their rights. The focus here is on empowerment, non-discrimination, human rights as well as increasing and supporting social participation of people with mental health problems or disorders, including support to access the labour market and return-to-work programmes. Different European countries have been experimenting with Individual Placement and Support (IPS) programmes to enhance access to paid employment for people with mental health disorders. A large randomised controlled trial conducted across six European sites concluded that overall, IPS produced stronger outcomes than alternative vocational services and that its overall costs for health and social care systems were lower²⁵⁶. IPS may thus be a promising approach which appears to work well across different European countries.

Priority area 5: Supporting EU countries to develop and implement national plans for stroke encompassing the entire chain of care, from primary prevention to life after stroke

This priority area builds on the **European Stroke Action Plan 2018-2030**, developed by the European Stroke Organisation in consultation with the Stroke Alliance for Europe²⁵⁷. This plan identifies a number of priorities and targets for primary prevention of stroke, stroke care (organisation of stroke services, management of acute stroke, prevention, rehabilitation, evaluation of outcome and quality assessment) and life after stroke, along with research and development priorities for translational research. The ESAP 2018-2030 complements the WHO Global Action Plan on non-communicable diseases (NCDs) 2013–2020, the WHO-Europe NCD Action Plan and the UN Sustainable Development Goals for 2015 to 2030. One of the overarching targets is to develop and implement national plans for stroke encompassing the entire chain of care from primary prevention to life after stroke. The ESAP 2018-2030 sets out seven domains for action and related targets for 2030: 1. primary prevention, 2. organisation of stroke services, 3. management of acute stroke, 4. secondary prevention, 5. rehabilitation, 6. evaluation of stroke outcome and quality assessment, and 7. life after stroke.

Priority area 6: Improved screening and monitoring of stroke within primary care

The ESAP 2018-2030 states that primary prevention is a responsibility of public health, but also of (primary) healthcare. Within primary care, lifestyle interventions and pharmacological interventions could be offered to individual patients with a high risk of stroke. Countries may also improve screening, which may consist of a combination of opportunistic screening and monitoring of those at increased risk, and systematic screening for risk factors. In particular, awareness of hypertension as a risk factor of stroke may need to be raised among primary care professionals.

²⁵⁶ Knapp, M., Patel, A., Curran, C., Latimer, E., Catty, J., Becker, T., Drake, R. E., Fioritti, A., Kilian, R., Lauber, C., Roessler, W., Tomov, T., van Busschbach, J., Comas-Herrera, A., White, S., Wiersma, D., & Burns, T. (2013). Supported employment: cost-effectiveness across six European sites. *World psychiatry*, 12(1), 60-68. <https://doi.org/10.1002/wps.20017>

²⁵⁷ Norrving B, Barrick J, Davalos A, Dichgans M, Cordonnier C, Guekht A, Kutluk K, Mikulik R, Wardlaw J, Richard E, Nabavi D, Molina C, Bath PM, Stibrant Sunnerhagen K, Rudd A, Drummond A, Planas A, Caso V. Action Plan for Stroke in Europe 2018-2030. *Eur Stroke J*. 2018 Dec;3(4):309-336. doi: 10.1177/2396987318808719. Epub 2018 Oct 29. PMID: 31236480; PMCID: PMC6571507.

Priority area 7: Increasing awareness of stroke and recognition of signals of (ischemic) stroke among the general population and vulnerable populations in particular

As early treatment of stroke is essential to improve health outcomes and prevent long-lasting or remaining dysfunction, it is highly important that citizens have adequate knowledge about stroke and how to act in case of symptoms or signals of (ischemic) stroke. Countries may wish to (further) implement information campaigns and improve access to information and help (e.g., 24/7 help desks) to increase awareness of stroke and improve signal/symptom recognition and adequate help-seeking. As stroke is more prevalent among people in a less favourable socioeconomic position, who may also be harder to reach through mass-media campaigns because of limited access to information channels and care services, limited health or digital literacy or because of language problems, countries may consider innovative strategies to reach these people. Co-creating and implementing such strategies with persons belonging to the target population is essential to maximise effectiveness.

Priority area 8: Changing attitudes towards dementia and tackling stigma associated with dementia

Countries may consider to further develop, put in place and support ‘dementia-friendly communities’, also building on the outcomes of the Second Joint Action on Dementia²⁵⁸. The dementia-friendly community approach^{259, 260} aims at changing the attitudes towards and the perceptions of people living with dementia, as well as reducing the stigma surrounding dementia. Furthermore, countries may wish to identify joint challenges and share and implement good practices to invigorate national dementia action. Countries may also work on increasing national awareness and support campaigns, such as the Irish ‘Understand Together Campaign’²⁶¹.

Priority area 9: Prevention and early detection of dementia

Policy recommendations on the prevention, early detection and management of Alzheimer’s disease and other types of dementia made by international organisations and EU-funded projects have been recently summarised by the European Commission Joint Research Centre²⁶². Preventive strategies may address the twelve modifiable risk factors of dementia²⁶³, which opens up possibilities for **public health** interventions targeting lifestyle factors and cognitive function across the life course, environmental and social determinants, and prevention and management of co-morbidities, such as depression, diabetes, hypertension, obesity, head injury and hearing impairment²⁶⁴. These preventive actions could be integrated into wider programmes, also taking into account that many modifiable risk factors **cluster among socio-economic and otherwise vulnerable communities**. Particular attention may also be needed to increase the knowledge on dementia among primary and social care professionals, for example, to **detect dementia earlier in younger people**. Furthermore, countries may consider **supporting the creation of social**

²⁵⁸ <https://webarchive.nrscotland.gov.uk/20210302011848/https://www.actondementia.eu/>

²⁵⁹ Hebert CA, Scales K. Dementia friendly initiatives: a state of the science review. *Dementia* 2017, 21 September. <https://journals.sagepub.com/doi/10.1177/1471301217731433>

²⁶⁰ Thijssen M, Daniels R, Lexis M, et al. How do community-based dementia friendly initiatives work for people with dementia and their caregivers, and why? A rapid realist review. *International Journal of Geriatric Psychiatry* 2021: 1-14. <https://onlinelibrary.wiley.com/doi/epdf/10.1002/gps.5662>

²⁶¹ See for description of case study: Alzheimer’s Innovation Readiness Index 2021. Alzheimer’s Disease International, 2021. https://www.alzint.org/u/GCOA_AIRI_AlzIndeXReport_FINAL.pdf

²⁶² Policy recommendations for dementia prevention | Knowledge for policy (europa.eu)

²⁶³ Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. [https://doi.org/10.1016/S0140-6736\(20\)30367-6](https://doi.org/10.1016/S0140-6736(20)30367-6)

²⁶⁴ WHO Guidelines on risk reduction of cognitive decline and dementia, 2019: <https://apps.who.int/iris/rest/bitstreams/1257946/retrieve>

environments that support a healthy lifestyle and healthy ageing, and/or to support municipalities and local communities to establish effective preventive services for older citizens, including models for preventive home visits and early detection of dementia.

Priority area 10: Implementing person-centred integrated care models, to better manage neurological disorders and support the quality of life of patients and their families

Policy recommendations to **improve the quality of care and management of stroke** have been suggested by the European Stroke Organisation in their 'European Stroke Action Plan 2018-2030'²⁶⁵. As mentioned above, this plan identifies a number of priorities and targets for primary prevention, care (organisation of stroke services, management of acute stroke, prevention, rehabilitation, evaluation of outcome and quality assessment) and life after stroke, along with research and development priorities for translational research. One of the overarching targets for 2030 is to treat at least 90% of all stroke patients in Europe in a **dedicated stroke unit** as the first level of care. More suggestions on how the quality and outcomes of stroke care could be improved are provided in the plan.

Policy recommendations on **Alzheimer's disease and dementia management**, summarised by the European Commission Joint Research Centre²⁶⁶, that countries and stakeholders may consider for their actions include:

- Improving the quality and availability of dementia care, e.g., training primary care and social care professionals to support people in modifying lifestyle risk factors of dementia, treating clinical risk factors and co-morbidities and improving the early detection of dementia, in particular among younger people;
- Improving the quality and accessibility of dementia care for people from minority communities²⁶⁷;
- Supporting the quality of life of people with dementia and their family/caregivers by implementing effective interventions, such as multi-component exercise interventions and cognitive stimulation interventions²⁶⁸, and including group and eHealth interventions, and addressing factors that enable their sustainable implementation²⁶⁹, and establishing support services²⁷⁰.

Example: WHO Mental Health Gap Action Plan (mhGAP) and mDementia programme

²⁶⁵ Norrving B, Barrick J, Davalos A, Dichgans M, Cordonnier C, Guekht A, Kutluk K, Mikulik R, Wardlaw J, Richard E, Nabavi D, Molina C, Bath PM, Stibrant Sunnerhagen K, Rudd A, Drummond A, Planas A, Caso V. Action Plan for Stroke in Europe 2018-2030. *Eur Stroke J*. 2018 Dec;3(4):309-336. doi: 10.1177/2396987318808719. Epub 2018 Oct 29. PMID: 31236480; PMCID: PMC6571507.

²⁶⁶ https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/dementia-policy-recommendations-6_en

²⁶⁷ Duran-Kıraç G, Uysal-Bozkır Ö, Uittenbroek R, et al. Accessibility of health care experienced by persons with dementia from ethnic minority groups and formal and informal caregivers: A scoping review of European literature. *Dementia*. 2022;21(2):677-700. doi:10.1177/14713012211055307

²⁶⁸ McDermott O, Charlesworth G, Hogervorst E, Stoner C, Moniz-Cook E, Spector A, Cspike E, Orrell M. Psychosocial interventions for people with dementia: a synthesis of systematic reviews. *Aging Ment Health*. 2019 Apr;23(4):393-403. doi: 10.1080/13607863.2017.1423031. Epub 2018 Jan 17. PMID: 29338323.

²⁶⁹ Christie HL, Martin JL, Connor J, Tange HJ, Verhey FRJ, de Vugt ME, Orrell M. eHealth interventions to support caregivers of people with dementia may be proven effective, but are they implementation-ready? *Internet Interv*. 2019 Jul 24;18:100260. doi: 10.1016/j.invent.2019.100260. PMID: 31890613; PMCID: PMC6926245.

²⁷⁰ Daly Lynn J, Rondón-Sulbarán J, Quinn E, Ryan A, McCormack B, Martin S. A systematic review of electronic assistive technology within supporting living environments for people with dementia. *Dementia (London)*. 2019 Oct-Nov;18(7-8):2371-2435. doi: 10.1177/1471301217733649. Epub 2017 Oct 9. PMID: 28990408.

The Mental Health Gap Action Plan (mhGAP) is an information package for prioritised mental, neurological and substance use disorders, including dementia. It's composed of interventions for prevention and management for each condition.

Source: <https://apps.who.int/iris/bitstream/handle/10665/259161/WHO-MSD-MER-17.6-eng.pdf?sequence=1>

The mDementia programme provides health information to those at risk of developing dementia and to support carers of people living with dementia, leveraging mobile technologies.

Source: <https://www.who.int/publications/i/item/9789240019966>

To improve the quality of care and the **management of Parkinson's disease**, countries may consider implementing elements of the ParkinsonNet model, developed in the Netherlands. These key elements include 1. empowering patients by offering tailored (personalised) education and consultation and engaging them as partners in healthcare, 2. empowering expert professionals by training and supporting them, 3. empowering multidisciplinary teams by organising professionals in regional networks to deliver integrated care.

Example: ParkinsonNet, The Netherlands

ParkinsonNet is a model to optimise care for patients with Parkinson's disease. It has achieved full national reach in the Netherlands, with 70 regional networks and around 3 000 specifically trained care professionals from twelve disciplines. The key elements of the ParkinsonNet approach are the empowerment of professionals from various disciplines who are specifically trained and specialised in Parkinson's disease, the empowerment of patients by education and consultation, and the empowerment of integrated multidisciplinary care teams.

The ParkinsonNet approach has shown health outcomes to be equally good or better than usual care. One study found a 50% reduction in hip fractures and fewer inpatient hospital admissions. Other studies point to modest cost savings, that outweigh the costs of building and maintaining the network. The ParkinsonNet model has now spread to several other countries as an example of a low-cost care innovation to improve the management of Parkinson's disease.

Source: Bloem BR, Rompen L, de Vries NM, Klink A, Munneke M, Jeurissen P. ParkinsonNet : A low-cost health care innovation with a systems approach from the Netherlands. Health Affairs 2017 ; 36(11) : 1987-1996.

Source: <https://www.parkinsonnet.com/> and ParkinsonNet: A Low-Cost Health Care Innovation With A Systems Approach From The Netherlands | Health Affairs

Annex 5 – Options for policies and actions by strand and priority area

The list below provides examples of policies and actions that could be considered by Member States. New best and promising practices on NCDs regularly become available via the EU Best Practice Portal and can be considered for implementation.

No.	Policy option or best/promising practice	Source
INTEGRATED APPROACH		
Integrated approach area 1: Reducing health inequalities by addressing social determinants, health literacy and digital literacy		
Large scale: policy options at national or regional level		
0.1.1	Joint Action Health Equity Europe (JAHEE). (Aims to deliver a policy framework with a menu of actions and recommendations for national, regional and local uptake and implementation; develop better policies improve monitoring, governance, implementation and evaluation; implement good practices and facilitate exchange and learning; identify factors of success, barriers and challenges and how to overcome them.)	EU Best Practice: EC Health Programme Database
0.1.2	Title: Support for young families in difficulties; Origin: Vulnerable; Country: DE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=83	EU Best Practice Portal
0.1.3	Checklist for the analysis of equity in Health Strategies, Programmes and Activities; Country: ES; Link: https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/promocion/desigualdadSalud/Listachequeo_equidad.htm	Suggested by Spain
0.1.4	Italy developed a social stratifier in health records to facilitate the assessment of health inequalities and made Health Equity Audits a legal obligation in the new National and Regional Prevention Plans and developed and implemented a capacity building process to enable 20 Italian regions to fulfil this. Link: https://www.disuguaglianzedisalute.it/lequita-nei-piani-regionali-di-prevenzione-secondo-modulo-formativo-25-26-febbraio-2021/	Suggested by EuroHealthNet
0.1.5	Belgium: Initiated a health equity in-all-policies approach at Federal Level by facilitating research and monitoring, appointing 20 health equity ambassadors within different Federal departments; Link: Health System Performance Assessment: how equitable is the Belgian health system? KCE (fgov.be)	Suggested by EuroHealthNet
0.1.6	German Collaborative Network for Equity in Health developed a Good Practice database. The experience gained in Good Practice projects, programmes and networks offers valuable ideas for the further development of social status-based health promotion. Link: https://www.gesundheitliche-chancengleichheit.de/english/	Suggested by Germany
Targeted: practices at local or organisational level		
0.1.7	Title: Mothers peer educator in a low socio-economic status school setting; Origin: NCD Prevention; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=386	EU Best Practice Portal
0.1.8	Title: Promotion of Food and Physical Activity – Inequalities of Health; Origin: JANPA; Country: FR; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=234	EU Best Practice Portal
Integrated approach area 2: Digital tools to support health promotion, disease prevention and management		
Large scale: policy options at national or regional level		

0.2.1	Title: ETAPES (a public health initiative from the French authorities to pilot the use of remote monitoring (telemedicine) solutions); Link: https://solidarites-sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/telesante-pour-l-acces-de-tous-a-des-soins-a-distance/article/la-telesurveillance-etapes	ETAPES: La télésurveillance France
0.2.2	eHAction – Joint Action to support the eHealth Network, which aims to explore how eHealth could facilitate the management of chronic diseases and multi-morbidity, by increasing sustainability and efficiency of health systems, and by facilitating personalised care and empowering the citizen.	EU Best Practice: EC Health Programme Database
	The Digital Healthcare Act in Germany (DiGA) introduced in 2019 the “app on prescription” as part of healthcare provided to patients. Link: https://www.bfarm.de/EN/Medical-devices/Tasks/Digital-Health-Applications/_node.html	BfArM – Digital Health Applications (DiGA)
Targeted: practices at local or organisational level		
0.2.3	Title: platform mobile health Belgium, or mHealthBelgium. This is a platform for mobile apps that are CE marked as a medical device. The platform utilises a validation pyramid to categorise apps based on various criteria. Link: Validation pyramid – mHealthBELGIUM.	Validation pyramid – mHealthBELGIUM
Integrated approach area 3: Integration of health promotion and disease prevention in the health system		
Large scale: policy options at national or regional level		
0.3.1	Integrated care for older people: guidelines on community-level interventions to manage declines in intrinsic capacity (who.int)	Suggested by France
0.3.2	International Network of Health Promoting Hospitals and Health Services (HPH); Link: https://www.hphnet.org/standards/ . Designing/reviewing and piloting a plan for roll-out of the standards to support systematic implementation of health promotion and disease prevention in health care facilities	Suggested by Austria
Targeted: practices at local or organisational level		
0.3.3	Title: Embrace; Origin: ACT; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=318	EU Best Practice Portal
Integrated approach area 4: Enhancing and implementing effective screening approaches		
Large scale: policy options at national or regional level		
0.4.1	Early FH screening programme; Link: https://bmcpediatr.biomedcentral.com/articles/10.1186/s12887-019-1586-4	Suggested by European Society of Cardiology
Targeted: practices at local or organisational level		
0.4.2	HerzCheck – Mobile and telehealth screening to detect heart failure in remote areas (Germany); Link: https://www.herzcheck.org/herzcheck/	Suggested by Structural Heart Diseases Coalition
Integrated approach area 5: Implementing (updated) evidence-based guidelines for healthcare professionals		
Targeted: practices at local or organisational level		
0.5.1	For example, guidelines on the treatment of cardiovascular diseases; Example: ESC Guidelines & Scientific Documents (escardio.org)	Suggested by European Society of Cardiology
Integrated approach area 6: Health system redesign to deliver person-centred and integrated care		
Large scale: policy options at national or regional level		

0.6.1	JADECARE – Joint Action on implementation of digitally enabled integrated person-centred care. This Joint Action focuses on transfer of four best practices: Basque Health strategy in ageing and chronicity: integrated care; Catalan open innovation hub on ICT-supported integrated care services for chronic patients; the OptiMedis Model – Population-based integrated care (Germany); the Digital roadmap towards an integrated health care sector	EU Best practice: EC Health Programme Database
0.6.2	Title: CINDI Bulgaria (Countrywide Integrated Non-communicable Disease Intervention); Origin: CHRODIS; Country: BG; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=65	EU Best Practice Portal
0.6.3	Title: Healthy Kinzigital Germany; Origin: CHRODIS; Country: DE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=49	EU Best Practice Portal
0.6.4	Joint Action – CHRODIS Multimorbidity Care Model	CHRODIS
0.6.5	Title: Project VIGOUR. Link: https://vigour-integratedcare.eu/	vigour-integratedcare.eu
0.6.6	Title: Project SCIROCCO-Exchange (https://www.sciroccoexchange.com/)	sciroccoexchange.com
0.6.7	Title: Population Intervention Plan for Multimorbidity; Origin: ACT project; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=322	EU Best Practice Portal
Targeted: practices at local or organisational level		
0.6.8	Title: Chronic Patient Programme; Origin: ACT project; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=313	EU Best Practice Portal
Integrated approach area 7: Age-, gender- and culture-sensitive strategies		
Large scale: policy options at national or regional level		
0.7.1	Healthy ageing promotion and frailty prevention in the framework of the prevention and health promotion strategy of the Spanish National Health Service. Including: Road map for frailty approach; Consensus document on frailty and falls prevention among the elderly (in the coming weeks it is expected to publish an update and later its translation into English). Link: https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/Fragilidadycaidas.htm	Suggestion from Spain
Targeted: practices at local or organisational level		
0.7.2	Title: Our Life as Elderly; Origin: Vulnerable; Country: FI, SE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=98	EU Best Practice Portal
0.7.3	Title: Teens understanding and taking control health; Origin: NGO Health Award 2018; Country: SE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=366	EU Best Practice Portal
Integrated approach area 8: Regulation and support for people with NCDs and their caregivers to facilitate social and labour participation		
Large scale: policy options at national or regional level		
0.8.1	Title: Individual Placement and Support in Italy; Origin: MHCompass; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=183	EU Best Practice Portal
0.8.2	Title: Fighting Stigma at Work: ONE OF US – the national campaign for antistigma in Denmark; Origin: MHCompass; Country: DK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=269	EU Best Practice Portal
0.8.3	Title: Individual Placement and Support for Employment; Origin: MHCompass; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=159	EU Best Practice Portal

Integrated approach area 9: Improving the availability of NCD data for decision makers		
Large scale: policy options at national or regional level		
0.9.1	Development of registries, such as the Swedish Heart Failure Registry. Link: https://pubmed.ncbi.nlm.nih.gov/30092697/	Suggested by The Patient's Voice
0.9.2	RES-Q is a Registry of Stroke Care Quality. Link: https://qualityregistry.eu/	Suggested by Stroke Alliance for Europe (SAFE) and European Stroke Organisation (ESO)
STRAND 1: HEALTH DETERMINANTS		
Health determinants area 1: Control use of tobacco and related products among the general population		
Large scale: policy options at national or regional level		
1.1.1	Title: Tobacco Free Ireland – Ireland's tobacco control policy and programme operating under the Healthy Ireland Framework for Health and Wellbeing 2013-2025; Origin: CHRODIS; Country: IE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=50	EU Best Practice Portal EU Joint Action CHRODIS best practice
1.1.2	Title: SmokeFreeGreece; Origin: NGO Health Award 2018; Country: EL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=368	EU Best Practice Portal
1.1.3	Title: VIVID Institute for the Prevention of Addiction; Origin: NGO Health Award 2018; Country: AT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=369	EU Best Practice Portal
1.1.4	Title: Total Ban on Smoking in Indoor and Some Outdoor Public Places; Origin: CHRODIS; Country: BG; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=56	EU Best Practice Portal
1.1.5	Joint Action on Tobacco Control 2 (JATC2), to support the implementation of the EU Tobacco Products Directive and EU Tobacco Advertising Directive	EU Best Practice: EC Health Programme Database
1.1.6	Increase excise taxes and prices on tobacco products	WHO Best Buy*
1.1.7	Implement plain/standardised packaging and/or large graphic health warnings on all tobacco packaging (N.B. Requires capacity for implementing and enforcing regulation and legislation)	WHO Best Buy*
1.1.8	Enact and enforce comprehensive bans on tobacco advertising, promotion and sponsorship (N.B. Requires capacity for implementing and enforcing regulation and legislation)	WHO Best Buy*
1.1.9	Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport (N.B. Requires capacity for implementing and enforcing regulation and legislation)	WHO Best Buy*
1.1.10	Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke (N.B. Requires capacity for implementing and enforcing regulation and legislation)	WHO Best Buy*
1.1.11	Provide cost-covered, effective and population-wide support (including brief advice, national toll-free quit line services) for tobacco cessation to all those who want to quit (N.B. Requires sufficient trained providers and a better functioning health system)	WHO Effective intervention**

1.1.12	Implement measures to minimise illicit trade in tobacco products	WHO Recommended intervention***
1.1.13	Ban cross-border advertising, including using modern means of communication	WHO Recommended intervention***
1.1.14	Provide mobile phone-based tobacco cessation services for all those who want to quit	WHO Recommended intervention***
Targeted: practices at local or organisational level		
1.1.15	Title: Workplace Health Promotion – Lombardy WHP Network; Origin: CHRODIS; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=63 (Implementation of good practice activities in workplaces to obtain/maintain the "Workplace Health Promotion Site" logo. The areas of good practice are: nutrition, tobacco, physical activity, road safety, alcohol and substances, and well-being.)	EU Best Practice Portal
1.1.16	Title: Nine Months Zero; Origin: RARHA; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=279	EU Best Practice Portal
Health determinants area 2: Prevent children, adolescents, and young adults from starting to use tobacco and related products		
Large scale: policy options at national or regional level		
1.2.1	Title: Education Against Tobacco; Origin: NGO Health Award 2018; Country: DE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=362	EU Best Practice Portal
1.2.2	X-HALE Youth Smoking Prevention Programme	EU Health Award winner
1.2.3	Youth Organisation No Excuse Slovenia	EU Health Award winner
1.2.4	Title: Kinder Stark Machen; Participatory initiative for early addiction prevention from the age of 4; Link: https://www.kinderstarkmachen.de/	Suggested by Germany
Health determinants area 3: Reduce harmful consumption of alcohol among the general population		
Large scale: policy options at national or regional level		
1.3.1	Title: The Swedish National Alcohol Helpline; Origin: RARHA; Country: SE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=281	EU Best Practice Portal
1.3.2	Increase excise taxes on alcoholic beverages (N.B. Requires an effective system for tax administration and should be combined with efforts to prevent tax avoidance and tax evasion)	WHO Best Buy* WHO SAFER initiative
1.3.3	Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising, sponsorship and promotion (across multiple types of media), paying special attention to all digital and social media, and networks. (N.B. Requires capacity for implementing and enforcing regulations and legislation)	WHO Best Buy* WHO SAFER initiative
1.3.4	Strengthen restrictions on the availability of alcohol (number, density and location of places – especially protection of children's environments, hours of sale, etc.)	WHO SAFER initiative
1.3.5	Enact and enforce restrictions on the physical availability of retailed alcohol (via reduced hours of sale) (N.B. Formal controls on sale need to be complemented by actions addressing illicit or informally produced alcohol).	WHO Best Buy* WHO SAFER initiative
1.3.6	Advocate the creation of a legally binding regulatory framework similar to the WHO Framework Convention on Tobacco Control	WHO SAFER initiative

1.3.8	Enact and enforce drink-driving laws and blood alcohol concentration limits via sobriety checkpoints (N.B. Requires allocation of sufficient human resources and equipment)	WHO Effective intervention**
1.3.9	Carry out regular reviews of prices in relation to level of inflation and income	WHO Recommended intervention***
1.3.10	Establish minimum prices for alcohol where applicable	WHO Recommended intervention***
1.3.11	Provide consumer information about, and label, alcoholic beverages to indicate, the harm related to alcohol and mandatory labelling of ingredients and nutritional content	WHO Recommended intervention***
1.3.12	Alcohol pricing is a key method used to reduce consumption, including: taxes based on size, alcohol content and value; minimum unit pricing; other minimum alcohol pricing tools, such as bans on below-cost selling.	OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies
1.3.13	Alcohol availability can be restricted to affect intake through: restrictions on hours and days of alcohol sales; restrictions on the density of alcohol outlets; minimum legal purchasing age	OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies
1.3.14	Policies to curb alcohol marketing help to reduce encouragement to drink, such as: advertising on traditional (e.g., television, radio and print media) and new digital media platforms (e.g., social media); sport sponsorship	OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies
1.3.15	Consumer information can improve awareness of the health risks associated with alcohol, including: ingredients and nutritional labelling; mass media campaigns; school-based education programmes.	OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies
1.3.16	Low Risk Alcohol Consumption Thresholds for Spain and awareness raising materials for policymakers, health workers and citizens	Spanish Ministry of Health
1.3.17	Lines of action in the field of prevention of alcohol consumption of the Spanish Working group of regional representatives on alcohol prevention.	Spanish Ministry of Health
1.3.18	Awareness raising materials and web-based information for prevention of alcohol consumption in pregnancy and FASD prevention.	Spanish Ministry of Health
Targeted: practices at local or organisational level		
1.3.19	Title: The Local Alcohol, Tobacco and Gambling Policy Model; Origin: RARHA; Country: FI; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=290	EU Best Practice Portal
1.3.20	Title: "Drink Less" programme; Origin: RARHA; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=282	EU Best Practice Portal
1.3.21	Provide brief psychosocial intervention for persons with hazardous and harmful alcohol use (N.B. Requires trained providers at all levels of health care)	WHO Effective intervention**
1.3.22	Provide prevention, treatment and care for alcohol use disorders and comorbid conditions in health and social services	WHO Recommended intervention***

1.3.23	Screening, brief interventions and treatment that targets harmful consumption of alcohol: excessive drinkers are identified through various screening tools. Following screening: excessive drinkers receive brief interventions, which typically last between 5 and 30 minutes over 1-5 sessions; dependent drinkers may be referred for specialised psychosocial and pharmacotherapy treatment.	OECD (2021), Preventing Harmful Alcohol Use, OECD Health Policy Studies
Health determinants area 4: Prevent the consumption of alcohol among children, adolescents, and young adults		
Large scale: policy options at national or regional level		
1.4.1	Enact and enforce an appropriate minimum age for purchase or consumption of alcoholic beverages and reduce the density of retail outlets	WHO Recommended intervention***
1.4.2	Restrict or ban promotions of alcoholic beverages in connection with sponsorships and activities targeting young people	WHO Recommended intervention***
Targeted: practices at local or organisational level		
1.4.3	Title: Web-based individual coping and alcohol-intervention programme; Origin: RARHA; Country: SE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=280	EU Best Practice Portal
1.4.4	Title: Kinder Stark Machen; Participatory initiative for early addiction prevention from the age of 4. Link: https://www.kinderstarkmachen.de/	Suggested by Germany
Health determinants area 5: Reduce unhealthy eating, physical inactivity, overweight and obesity among the general population		
Large scale: policy options at national or regional level		
1.5.1	WholEUGrain – Transfer of Danish best practice model for a Whole Grain Partnership. (The overall objectives are to promote good health through healthy diets, prevent diseases, reduce inequalities and establish supportive environments for healthy lifestyles by developing country-based whole grain public/private partnerships.) Country: DK; Link: https://webgate.ec.europa.eu/chafea_pdb/health/projects/874482/summary	EU Best Practice: EC Health Programme Database
1.5.2	Best-ReMaP Joint Action – Implement a European Standardised Monitoring system for the reformulation of processed foods	EU Best Practice: EC Health Programme Database
1.5.3	Reduce salt intake through the reformulation of food products to contain less salt and the setting of target levels for the amount of salt in foods and meals (N.B. Requires multisectoral actions with relevant ministries and support by civil society)	WHO Best Buy*
1.5.4	Reduce salt intake through a behaviour change communication and mass media campaign	WHO Best Buy*
1.5.5	Reduce salt intake through the implementation of front-of-pack labelling (N.B. Regulatory capacity along with multisectoral action is needed)	WHO Best Buy*
1.5.6	Reduce salt intake through the establishment of a supportive environment in public institutions, such as hospitals, schools, workplaces and nursing homes, to enable lower sodium options to be provided	WHO Best Buy*
1.5.7	Eliminate industrial trans-fats through the development of legislation to ban their use in the food chain (N.B. Regulatory capacity along with multisectoral action is needed).	WHO Effective intervention**
1.5.8	Reduce sugar consumption through effective taxation on sugar-sweetened beverages	WHO Effective intervention**

1.5.9	Promote and support exclusive breastfeeding for the first six months of life, including promotion of breastfeeding.	WHO Recommended intervention***
1.5.10	Implement subsidies to increase the intake of fruit and vegetables	WHO Recommended intervention***
1.5.11	Replace trans-fats and saturated fats with unsaturated fats through reformulation, labelling, fiscal policies or agricultural policies	WHO Recommended intervention***
1.5.12	Limiting portion and package size to reduce energy intake and the risk of overweight/obesity	WHO Recommended intervention***
1.5.13	Implement nutrition labelling to reduce total energy intake (kcal), sugars, sodium and fats	WHO Recommended intervention***
1.5.14	Implement mass media campaign on healthy diets, including social marketing to reduce the intake of total fat, saturated fats, sugars and salt, and promote the intake of fruit and vegetables	WHO Recommended intervention***
1.5.15	Food labelling schemes (For instance, the “Keyhole logo” in place in Denmark, Norway and Sweden since 2009 and more recently in Iceland and Lithuania helps consumers to choose products that are lower in sugar, fats and salt, and higher in whole grains. Similarly, the NutriScore label, implemented in France as of April 2017, is a five-colour scale that summarises the healthiness of a product.)	OECD, The Heavy Burden of Obesity, 2019 OECD, Obesity update, 2017
1.5.16	Menu labelling schemes (For instance, legislation in some countries requires displaying calorie counts on restaurant menus (e.g., in chain restaurants in the United States as of May 2017, in several Australian states since 2016, and in Ontario, Canada, as of 2017.)	OECD, The Heavy Burden of Obesity, 2019
1.5.17	Mass media campaigns, including social media and new technologies (for example, by providing recipes and tips for healthier eating through a dedicated website, mobile apps and online tools)	OECD, The Heavy Burden of Obesity, 2019
1.5.18	Increase access to active public transport	OECD, The Heavy Burden of Obesity, 2019
1.5.19	Food reformulation (For example, in 2018, Public Health England published a reformulation programme challenging the industry to reduce calories by 20% by 2024, in foods high in sugar, salt, calories and saturated fat, such as ready meals, pizzas, snacks sauces and dressings. Also in 2018, the OECD put forward to the G20 a proposal for a global deal between national governments and industry to scale up these efforts at the global level.)	OECD, The Heavy Burden of Obesity, 2019
1.5.20	Policy packages to promote healthier lifestyles: a communications package that combines food labelling, advertising restrictions and mass media campaigns; and a mixed package, consisting of policies that are less wide-spread including menu labelling, prescribing physical activity and workplace wellness programmes. These more innovative interventions provide an opportunity to step up the policy response: a package to promote physical activity, through prescribing physical activity, public transport interventions, physical education in schools and actions to counteract workplace sedentary behaviour.	OECD, The Heavy Burden of Obesity, 2019
1.5.21	Provide convenient and safe access to quality public open space and adequate infrastructure to support walking and cycling	WHO Recommended intervention***
1.5.22	EUPAP – Transfer of Swedish best practice for physical activity, on prescription. Link: https://www.eupap.org/	EU Best Practice: EC Health Programme Database

1.5.23	Title: Best-ReMaP: Healthy Food for a Healthy Future	bestremap.eu
1.5.24	Hungary introduced a Public Health Product Tax (PHPT) on non-alcoholic beverages (e.g., soft and energy drinks), flavoured alcoholic beverages-sugar sweetened or sweeteners, but also on pre-packaged sweetened products, fruit jams and sweetened preserves, and salty snacks. Link: https://www.euro.who.int/__data/assets/pdf_file/0004/287095/Good-practice-brief-public-health-product-tax-in-hungary.pdf	WHO Good Practice
1.5.25	Title: A Nationwide, Theory-Based, Mass Media Campaign to Promote Physical Activity: "Follow the Whistle: Physical Activity Is Calling You". Link: https://pubmed.ncbi.nlm.nih.gov/33147704/	
1.5.26	Healthy Weight for Ireland: Obesity Policy and Action Plan 2016-2025; Link: https://health.gov.ie/wp-content/uploads/2016/09/A-Healthy-Weight-for-Ireland-Obesity-Policy-and-Action-Plan-2016-2025.pdf	
1.5.27	Food Reformulation: German National Reduction and Innovation Strategy for Sugar, Fats and Salt in Processed Foods; Link: https://www.bmel.de/EN/topics/food-and-nutrition/healthy-diet/reduction-innovation-strategy-less-sugar-fat-salt.html	Suggested by Germany
1.5.28	Title: A Nationwide, Theory-Based, Mass Media Campaign to Promote Physical Activity: "Follow the Whistle: Physical Activity Is Calling You"; Country: PT; Link: https://www.mdpi.com/1660-4601/17/21/8062	Suggested by Portugal
1.5.29	Physical Activity Assessment and Promotion Tools in the Portuguese Primary Health Care; Country: PT; Link: https://www.mdpi.com/1660-4601/17/3/815	Suggested by Portugal
Targeted: practices at local or organisational level		
1.5.30	Implement nutrition education and counselling in different settings (for example, in preschools, schools, workplaces and hospitals) to increase the intake of fruits and vegetables	WHO Recommended intervention***
1.5.31	Title: Combined lifestyle intervention (GLI) programmes; Country: NL; Link: https://www.rivm.nl/gecombineerde-leefstijlinterventie/programmas	Expert suggestion
1.5.32	Prescription of physical activity by primary care doctors	OECD, The Heavy Burden of Obesity, 2019
1.5.33	Mobile apps to promote healthier lifestyles	OECD, The Heavy Burden of Obesity, 2019
1.5.34	Workplace wellness programmes	OECD, The Heavy Burden of Obesity, 2019
1.5.35	Workplace sedentary behaviour programmes	OECD, The Heavy Burden of Obesity, 2019
1.5.36	Implement multi-component workplace physical activity programmes	WHO Recommended intervention***
1.5.37	Promotion of physical activity through organized sport groups and clubs, programmes and events	WHO Recommended intervention***
1.5.38	Implement community-wide public education and awareness campaign for physical activity which includes a mass media campaign combined with other community-based education, motivational and environmental programmes aimed at supporting behavioural change of physical activity levels.	WHO Best Buy*

1.5.39	Provide physical activity counselling and referral as part of routine primary health care services through the use of a brief intervention (N.B. Requires sufficient, trained capacity in primary care). In France, the Haute Autorité de Santé issued guidelines (2019): Guide de promotion, consultation et prescription médicale d'activité physique et sportive pour la santé. Link: ORGANISATION DES PARCOURS (has-sante.fr)	WHO Effective intervention**
1.5.40	Ensure that macro-level urban design incorporates the core elements of residential density, connected street networks that include sidewalks, easy access to a diversity of destinations and access to public transport (N.B. Requires involvement and capacity of other sectors apart from health).	WHO Recommended intervention***
1.5.41	Title: An innovative multidisciplinary model to improve the adoption of a healthy lifestyle by people with obesity or type 2 diabetes; Origin: CHRODIS; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=45	EU Best Practice Portal
1.5.42	Title: EATRIGT; Origin: JANPA; Country: IE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=246 .	EU Best Practice Portal
1.5.43	Title: Implement multi-component workplace physical activity programmes	WHO Best Buy*
1.5.44	Title: Impulsgeber Bewegungsförderung; Digital planning tool for the development of a movement-friendly community for older people https://www.aelter-werden-in-balance.de/impulsgeber-bewegungsfoerderung/	Suggested by Germany
Health determinants area 6: Reduce unhealthy eating, physical inactivity, overweight and obesity among children and adolescents		
Large scale: policy options at national or regional level		
1.6.1	JANPA – Joint Action on Nutrition and Physical Activity: general objective is to contribute to halting the rise in overweight and obesity in children and adolescents by 2020 (e.g., through the identification, selection and sharing of best data and practices)	EU Best Practice: EC Health Programme Database
1.6.2	Regulation of advertising of unhealthy food to children (For instance, in Norway a united group of food manufacturers and suppliers agreed on a new self-regulation scheme to voluntarily ban marketing of unhealthy foods and beverages to children younger than 13. Communication channels included are, for instance, movies in theatres starting before 6.30pm, competitions and interactive games for children. In Denmark, a self-regulation code has been in place since 2008 through “The Forum of Responsible Food Marketing Communication”. The code targets marketing to children on TV, printed media and the internet of products with a high content of sugar, fats and salt. From 2015, the industry in Slovenia has voluntarily agreed to restrict soft drink advertising in school settings as well as in magazines and cinemas for children under the age of 12. In Poland, a law was implemented in 2015 to regulate promotion and advertising of foods sold at pre-schools, primary and secondary schools. In Spain, since 2015, educational and health authorities can allow any advertising and promotional campaigns in schools, but only when they believe that the activity would be of benefit to the interests of the minors.)	OECD, The Heavy Burden of Obesity, 2019
1.6.3	Legislation prohibiting the sale of energy drinks to children below age of 18 (this legislation is in place in Latvia since June 2016. It also prohibits advertising of these drinks before, during and after TV programmes targeting children less than 18 years of age, their advertising in educational establishments, as well as their association with sports facilities. Similar advertising restrictions have existed in neighbouring Lithuania since 2014).	OECD, The Heavy Burden of Obesity, 2019
1.6.4	Title: Regulation on daily physical education in schools; Origin: JANPA; Country: HU; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=245	EU Best Practice Portal
1.6.5	Food Reformulation: German National Reduction and Innovation Strategy for Sugar, Fats and Salt in Processed Foods. Link: https://www.bmel.de/EN/topics/food-and-nutrition/healthy-diet/reduction-innovation-strategy-less-sugar-fat-salt.html	Suggested by Germany
Targeted: practices at local or organisational level		

1.6.6	Title: National model 'Child to Healthier Weight'; Country: NL; Link: https://kindnaargezonderegewicht.nl/	Expert suggestion
1.6.7	Title: Dutch Obesity Interventions in Teenagers (DOiT); Origin: CHRODIS; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=57	EU Best Practice Portal
1.6.8	Title: Identification and prevention of Dietary- and lifestyle-induced health Effects in Children and infants; Origin: JANPA; Country: BE, DE, ES, HU, IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=237	EU Best Practice Portal
1.6.9	Title: Intervention improving the food supply (excluding school meals) with educational support in middle and high schools; Origin: JANPA; Country: FR; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=232	EU Best Practice Portal
1.6.10	Title: Hungarian Aqua Promoting Programme in the Young (HAPPY) and HAPPY Week; Origin: JANPA; Country: HU; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=244	EU Best Practice Portal
1.6.11	Promotion of physical activity in schools	OECD, The Heavy Burden of Obesity, 2019
1.6.12	Title: Active School Flag; Origin: CHRODIS; Country: IE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=64	EU Best Practice Portal
1.6.13	Title: Physical activity promotion in primary schoolchildren. Intervention study centred on playground marking; Origin: JANPA; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=253	EU Best Practice Portal
1.6.14	Implement whole-of-school programme that includes quality physical education, availability of adequate facilities and programmes to support physical activity for all children	WHO Recommended intervention***
1.6.15	Title: Smart Family. (A lifestyle counselling programme developed by healthcare professionals in 2006, to prevent and tackle childhood obesity. It is an ongoing programme used in almost every municipality in Finland.); Country: FI; Link: https://ec.europa.eu/health/other-pages/basic-page/online-marketplace-event-best-practices-risk-factors-non-communicable-diseases_pl	EU Best Practice Portal
1.6.16	Title: Implement whole-of-school programme that includes quality physical education, availability of adequate facilities and programmes to support physical activity for all children	WHO Best Buy*
1.6.17	Title: Provide physical activity counselling and referral as part of routine primary health care services through the use of a brief intervention	WHO Best Buy*
1.6.18	German Nutrition Society's Standard for Meals in Daycare Centres and in Schools. Link: https://www.fitkid-aktion.de/fileadmin/user_upload/medien/DGE-QST/DGE_Quality_Standard_Meals_Daycare.pdf and https://www.schuleplusessen.de/fileadmin/user_upload/medien/DGE-QST/DGE_QST_Meals_Schools.pdf	Suggested by Germany
Health determinants area 7: Creating healthy environments		
Large scale: policy options at national or regional level		
1.7.1	Title: Ensure that macro-level urban design incorporates the core elements of residential density, connected street networks that include sidewalks, easy access to a diversity of destinations and access to public transport	WHO Best Buy*
1.7.2	Title: Provide convenient and safe access to quality public open space and adequate infrastructure to support walking and cycling	WHO Best Buy*
1.7.3	Title: World Health Organisation (WHO) action on building climate-resilient health systems; Link: https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/country-support/building-climate-resilient-health-systems	Suggested by European Federation of Allergy and

		Airways Diseases Patients' Associations (EFA)
1.7.4	Title: European Climate and Health Observatory, Workplan 2021-2022; Link: https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/Implementacion_Local.htm	Suggested by European Federation of Allergy and Airways Diseases Patients' Associations (EFA)
1.7.5	Title: StadtRaumMonitor: Instrument zur partizipativen Bedarfserhebung, Priorisierung und intersektoralen Planung im Rahmen der gesundheitsfördernden Stadt- bzw. Kommunalentwicklung. Link: https://stadtraummonitor.bzga.de/	Suggested by Germany
1.7.6	National licensing schemes to restrict the availability of health-harming products, including tobacco and alcohol	Suggested by WHO
1.7.7	Local Implementation of the Spanish National Strategy for Health Promotion and Prevention; Link: https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/Implementacion_Local.htm	Suggestion from Spain
STRAND 2: DIABETES		
Diabetes area 1: Prevent the onset of type 2 diabetes among high-risk populations		
Large scale: policy options at national or regional level		
2.1.1	Title: Diabetes prevention and screening in vulnerable populations of the metropolitan Lisbon area; Origin: CHRODIS+; Country: PT; Link: http://chrodis.eu/good-practice/diabetes-prevention-screening-vulnerable-populations-metropolitan-lisbon-area-portugal/	CHRODIS+
2.1.2	Influenza vaccination for patients with diabetes	WHO Recommended intervention**
2.1.3	Aha! Ab-heute-anders! 2.0 – “change right now!” – Comprehensive diabetes prevention programme. Country: DE	CHRODIS Joint Action
Targeted: practices at local or organisational level		
2.1.4	Title: The DE-PLAN study in Greece; Origin: CHRODIS+; Country: GR; Link: http://chrodis.eu/good-practice/de-plan-study-greece-greece/ (Achieving better understanding of diabetes risk and building up motivation for an intention to change lifestyle)	CHRODIS+
2.1.5	Lifestyle interventions for preventing type 2 diabetes	WHO Recommended intervention*
Diabetes area 2: Reduce undiagnosed diabetes by raising awareness, targeted screening of high-risk individuals or early detection approaches		
Large scale: policy options at national or regional level		
2.2.1	Title: The Diabetes Screening Palermo Study; Origin: CHRODIS; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=71	EU Best Practice Portal
2.2.2	Promote selective screening by structured diabetes prevention programme. Based on the development and effective implementation of computerised alert systems to detect the population susceptible to screening	Diabetes Strategy of the National Health System (Spain)
2.2.3	Annual screening for DM2, by means of basal glycemia in the population at risk	Diabetes Strategy of the National Health System (Spain)

2.2.4	Promote the monitoring and follow-up of fasting plasma glucose screening frequently (e.g., every three years) in the population over 45 years of age as part of a structural cardiovascular prevention programme	Diabetes Strategy of the National Health System (Spain)
2.2.5	Diabetic retinopathy screening for all diabetes patients and laser photocoagulation for prevention of blindness (N.B. Requires systems for patient recall)	WHO Effective intervention*
2.2.6	Screening of people with diabetes for proteinuria and treatment with angiotensin-converting-enzyme inhibitor for the prevention and delay of renal disease	WHO Recommended intervention**
2.2.7	Title: HALT2Diabetes is set up in Flanders in collaboration with the Flemish Government. (In HALT2Diabetes, people with a high risk for type 2 diabetes and cardiovascular disease are identified and guided towards a healthy lifestyle.) Country: BE; Link: https://www.diabetes.be/nl/preventie-en-sensibiliser/halt2diabetes-voor-professionelen/wat-halt2diabetes	Lampaert A, Buyse L, et al. HALT2Diabetes, An integrated type 2 diabetes and cardiovascular disease prevention strategy in Flanders, 2018.
Targeted: practices at local or organisational level		
2.2.8	Title: Diabetes Counselling on Wheels: Early Detection and Counselling on Diabetes for Citizens of Turkish Origin and the Rural Population Germany; Origin: CHRODIS; Country: DE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=52	EU Best Practice Portal
2.2.9	Title: Disease Management Programme Therapie Aktiv; Origin: CHRODIS; Country: AT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=58	EU Best Practice Portal
2.2.10	Title: Reverse Diabetes2 Now; Origin: NCD Prevention; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=391	EU Best Practice Portal
2.2.11	Title: Telehealth Service for patients with Type 2 Diabetes Mellitus in Central Greece; Origin: CHRODIS; Country: EL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=59	EU Best Practice Portal
2.2.12	Effective glycaemic control for people with diabetes, along with standard home glucose monitoring for people treated with insulin to reduce diabetes complications	WHO Effective intervention*
2.2.13	Preventive foot care for people with diabetes (including educational programmes, access to appropriate footwear, multidisciplinary clinics) (N.B. Requires systems for patient recall)	WHO Effective intervention*
2.2.14	Preconception care among women of reproductive age who have diabetes including patient education and intensive glucose management	WHO Recommended intervention**
Diabetes area 3: Prevent or delay complications by ensuring (access to) high-quality diabetes care		
Large scale: policy options at national or regional level		
2.3.1	CroDiab registry. Country: HR	EU Best Practice Portal
2.3.2	Telehealth Service for patients with Type 2 Diabetes Mellitus in Central Greece. Country: EL.	CHRODIS Joint Action
2.3.4	An innovative multidisciplinary model to improve the adoption of a healthy lifestyle by people with obesity or type 2 diabetes; Country: IT	CHRODIS Joint Action
Diabetes area 3a: Support diabetes patients' empowerment and self-management		

Large scale: policy options at national or regional level		
2.3.5	Empowering People with Diabetes within the Framework of JA CHRODIS Recommendations and Criteria through the Use of mHealth Technology. Country: BG	EU Best Practice Portal
Diabetes area 4: Implement care models that integrate proactive diabetes management in person-centred care		
Large scale: policy options at national or regional level		
2.4.1	Title: the Health Outcomes Observatory project (H2O) is an European partnership (Spain, Austria, Germany and Netherlands) between the public and private sectors under the framework of the Innovative Medicines Initiative. (It aims to create a standardised data governance and infrastructure system across Europe to incorporate patients' experiences and preferences in decisions affecting their individual healthcare and those of the entire patient community, covering diabetes, inflammatory bowel disease and cancer.) Link: https://health-outcomes-observatory.eu/about/	European Observatory
2.4.2	Title: Steno Diabetes Centers. (The Novo Nordisk Foundation, in collaboration with Denmark's administrative regions, has taken the initiative to establish five outpatient specialised multidisciplinary diabetes clinics throughout Denmark that focus on the care goals of individual patients, complemented by user-friendly surroundings and good accessibility.) Link: https://steno.dk/en/	https://www.sdcc.dk/english/Pages/default.aspx
Diabetes area 5: Support people with diabetes and their families in living with diabetes		
Large scale: policy options at national or regional level		
2.5.1	Title: Patient Education and Health Mastery; Origin: CHRODIS; Country: NO; Link: http://chrodis.eu/	CHRODIS
Targeted: practices at local or organisational level		
2.5.2	Title: Diabetes nursing speciality; Origin: CHRODIS; Country: NO; Link: http://chrodis.eu/	CHRODIS
Diabetes area 6: Increase awareness of the impact of diabetes for functioning and participation and fight stigmatisation of people with diabetes		
Large scale: policy options at national or regional level		
2.6.1	Title: Programme of Health Care for Persons with Diabetes in Croatia – Health Promotion; Origin: CHRODIS; Country: HR; Link: http://chrodis.eu/	CHRODIS
STRAND 3: CARDIOVASCULAR DISEASES (CVD)		
CVD area 1: Prevent the onset and progress of cardiovascular diseases		
Large scale: policy options at national or regional level		
3.1.1	Title: Health Promotion for People Belonging to the Cardiovascular Disease Risk Group; Origin: CHRODIS; Country: LT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=72 / http://chrodis.eu/good-practice/health-promotion-people-belonging-cardiovascular-disease-risk-group-hereinafter-program-lithuania/	CHRODIS+ EU Best Practice Portal
3.1.2	Title: A sustainable, active, primary prevention strategy for Cardiovascular Diseases in Italy for adults 50+ (Projects Cuore and Cardio 50); Origin: CHRODIS; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=46	EU Best Practice Portal
3.1.3	YOUNG50 – Transfer of Italian best practice CARDIO 50 (estimate cardiovascular risk among 50 years old population, identify high-risk individuals and activate integrated support model to intervene on risk factors)	EU Best Practice: EC Health Programme Database
Targeted: practices at local or organisational level		
3.1.4	Primary prevention of rheumatic fever and rheumatic heart diseases by increasing appropriate treatment of streptococcal pharyngitis at the primary care level (N.B. Depending on prevalence in specific countries or sub-populations)	WHO Effective intervention*

3.1.5	Croí myaction, a community-based cardiovascular disease prevention programme; Origin: CHRODIS+; Country: IE; Link: http://chrodis.eu/good-practice/croi-myaction-community-based-cardiovascular-disease-prevention-programme-ireland/	CHRODIS+
3.1.6	Title: Telehealth service for patients with advanced heart failure; Origin: SCIROCCO; Country: CZ; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=127	EU Best Practice Portal
3.1.7	Drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total risk* approach) and counselling to individuals who have had a heart attack or stroke and to persons with high risk of a fatal and non-fatal cardiovascular event in the next 10 years (N.B. Feasible in all resource settings, including by non-physician health workers)	WHO Best Buy*
3.1.8	Health Promotion for People Belonging to the Cardiovascular Disease Risk Group. Country: LT	CHRODIS Joint Action
CVD area 2: Early detection of cardiovascular diseases		
Large scale: policy options at national or regional level		
3.2.1	Swedish Heart Failure Registry. Link: https://pubmed.ncbi.nlm.nih.gov/30092697/	Suggested by Health First Europe
3.2.2	German Heart Failure Test questionnaire. Link: https://www.researchgate.net/publication/333644753_Fragebogen_zur_fruhen_Detektion_von_Herzinsuffizienz_DeHiT_Deutscher_Herzinsuffizienz-Test	Suggested by Health First Europe
3.2.3	Paediatric screening of Familial Hypercholesterolaemia patients. Countries: Czech Republic, Spain, Italy, Netherlands, Slovenia, Norway	EU Best Practice Portal
Targeted: practices at local or organisational level		
3.2.4	Treatment of new cases of acute myocardial infarction with either: primary percutaneous coronary interventions (PCI), aspirin and clopidogrel, acetylsalicylic acid, acetylsalicylic acid and clopidogrel, thrombolysis, aspirin and thrombolysis, or primary percutaneous coronary interventions (PCI) (N.B. Selection of option depends on health system capacity)	WHO intervention** Effective
3.2.5	Treatment of new cases of acute myocardial infarction initially in a hospital setting with follow up carried out through primary health care facilities	WHO intervention** Effective
3.2.6	Secondary prevention of rheumatic fever and rheumatic heart disease by developing a register of patients who receive regular prophylactic penicillin (N.B. Depending on prevalence in specific countries or sub-populations)	WHO intervention** Effective
3.2.7	Treatment of congestive cardiac failure with angiotensin-converting-enzyme inhibitor, beta-blocker and diuretic	WHO Recommended intervention***
3.2.8	Cardiac rehabilitation post myocardial infarction	WHO Recommended intervention***
3.2.9	Anticoagulation for medium-and high-risk non-valvular atrial fibrillation and for mitral stenosis with atrial fibrillation	WHO Recommended intervention***
CVD area 3: Improving (access to) high-quality CVD care and self-management support		
Large scale: policy options at national or regional level		
3.3.1	ESC/HFA Quality of Care Centres for heart failure management. Link: https://pubmed.ncbi.nlm.nih.gov/34718508/	Suggested by Health First Europe

3.3.2	Heart Failure Virtual Clinic in Ireland. Link: https://www.ehealthireland.ie/national-virtual-health-team/video-enabled-care-webinars/video-enabled-healthcare-in-heart-failure-service.pdf	Suggested by Health First Europe
3.3.3	TeleCare North Heart Failure Trial, Denmark; Link: https://pubmed.ncbi.nlm.nih.gov/30975047/	Suggested by Health First Europe
Targeted: practices at local or organisational level		
3.3.4	Nurse-led integrated heart failure care in Barcelona, Spain; Link: https://www.hfpolicynetwork.org/trailblazer/integrated-heart-failure-care-expanding-a-nurse-led-programme-in-spain/	Suggested by Health First Europe
STRAND 4: CHRONIC RESPIRATORY DISEASES		
CRD area 1: Prevention of the onset and progress of chronic respiratory diseases		
Large scale: policy options at national or regional level		
4.1.1	Legislative smoking bans	2021 GOLD Report
4.1.2	Influenza vaccination for patients with chronic obstructive pulmonary disease	WHO Recommended intervention**
4.1.3	Access to improved stoves and cleaner fuels to reduce indoor air pollution	WHO Recommended intervention**
4.1.4	Title: Finnish National Asthma Programme; Link: Asthma control: learning from Finland's success – The Lancet Respiratory Medicine	Suggested by AstraZeneca
4.1.5	Title: EU Autopollen project (2018-2022) (Aims to provide information and recommendations for the establishment of automatic pollen networks and the development of related products based on real-time pollen data. Since both pollen and sand/dust storms represent a serious threat to respiratory health, real-time information and forecast can prove vital for people with respiratory allergy and asthma. Accordingly, specific information thresholds can trigger immediate information alerting the public and vulnerable groups, facilitating preventative action); Link: https://www.eumetnet.eu/activities/miscellaneous/current-activities-mi/autopollen/	Suggested by European Federation of Allergy and Airways Diseases Patients' Associations (EFA)
4.1.6	Adopt a health impact driven air quality index in the EU inspired by the Canadian Air Quality Health Index: https://weather.gc.ca/airquality/pages/index_e.html	Suggested by European Federation of Allergy and Airways Diseases Patients' Associations (EFA)
4.1.7	Healthy Lungs for Life Campaign. Link: https://europeanlung.org/en/projects-and-campaigns/healthy-lungs-for-life/	Suggested by European Respiratory Society and European Lung Foundation
4.1.8	National lung health plans: long-term ambitious national-level respiratory strategies based on best examples of policy and practice to improve the outcomes for people living with lung conditions and to prevent the development of diseases.	Suggested by European Respiratory Society and European Lung Foundation
Targeted: practices at local or organisational level		
4.1.9	Cost-effective interventions to prevent occupational lung diseases, for example, from exposure to silica, asbestos	WHO Recommended intervention**

4.1.10	Counselling supporting smoking cessation delivered by healthcare professionals	2021 GOLD Report
4.1.11	Symptom relief for patients with asthma with inhaled salbutamol	WHO Effective intervention*
4.1.12	Symptom relief for patients with chronic obstructive pulmonary disease with inhaled salbutamol	WHO Effective intervention*
4.1.13	Treatment of asthma using low dose inhaled beclomethasone and short acting beta agonist	WHO Effective intervention*
CRD area 2: Early detection of chronic respiratory diseases		
Targeted: practices at local or organisational level		
4.2.1	Early detection of chronic airway disease enables clinicians to take the necessary steps to improve disease outcomes and modify progression – thereby minimising costs and burden to health systems and society. To do this effectively, healthcare professionals must be equipped with the appropriate training and tools to identify these conditions via regular health checks with an effective respiratory component as well as lung health assessments. Link: WEF_Blueprint_for_change_Chronic_airway_disease.pdf (weforum.org)	Suggested by AstraZeneca
4.2.2	Lung function testing programmes (including spirometry). Link: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases	Suggested by European Respiratory Society and European Lung Foundation
CRD area 3: Ensuring (access to) high-quality CRD care and self-management support		
Large scale: policy options at national or regional level		
4.3.1	Title: Telemonitoring COPD patients with frequent admissions; Origin: SCIROCCO; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=121	EU Best Practice Portal
4.3.2	Title: Telehomecare, Telemonitoring, Teleconsultation and telecare project aimed at patients with Heart Failure, Chronic obstructive pulmonary diseases and Diabetes; Origin: SCIROCCO; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=140	EU Best Practice Portal
4.3.3	Title: Asthma/COPD Telehealth Service; Origin: ACT; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=319	EU Best Practice Portal
4.3.4	ERS HERMES Examinations. The ERS HERMES examinations in adult and paediatric respiratory medicine set a common, high standard of knowledge amongst respiratory specialists and trainees within Europe. Link: https://europeanlung.org/en/get-involved/european-patient-ambassador-programme-epap/	Suggested by European Respiratory Society and European Lung Foundation
4.3.5	EPAP - European Patient Ambassador Programme. Online, self-learning programme that introduces patients and carers to some of the basic skills and knowledge. Link: https://europeanlung.org/en/get-involved/european-patient-ambassador-programme-epap/	Suggested by European Respiratory Society and European Lung Foundation
STRAND 5: MENTAL HEALTH AND NEUROLOGICAL DISORDERS		
Mental health and neurological disorders area 1: Supporting favourable conditions for mental health and increasing resilience, and implementing mental health-in-all policies		

Large scale: policy options at national or regional level		
5.1.1	Title: Mental Health First Aid in Finland; Origin: MHCompass; Country: FI; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=172	EU Best Practice Portal
5.1.2	Title: Guidance on community mental health services: promoting person-centred and rights-based approaches. Geneva: World Health Organization; 2021	Suggested by Mental Health Europe
5.1.3	The Skills for Life programmes – School based social emotional learning programmes developed jointly by Partnership for Children (UK), academics and educational resources specialists; Links: Zippy's Friends for ages 5 to 7; Apple's Friends for ages 7 to 9; Passport for ages 9 to 11; SPARK Resilience for ages 10 to 12; Zippy's Friends for Pupils with Special Educational Needs	Suggested by Mental Health Europe
5.1.4	Psychosocial interventions to strengthen the resilience of young people: ME-WE Project website: https://me-we.eu/ ; ME-WE Model: https://me-we.eu/wp-content/uploads/2021/09/EU-PB-ME-WE_v3.pdf ; ME-WE app: https://play.google.com/store/apps/details?id=se.appbolaget.mewe&hl=en https://apps.apple.com/se/app/me-we-young-carers/id1452257199?l=en	Suggested by Mental Health Europe
Mental health and neurological disorders area 2: Promoting mental well-being and preventing mental disorders		
Large scale: policy options at national or regional level		
5.2.1	Title: Lifeworks; Origin: MHCompass; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=158	EU Best Practice Portal
5.2.2	Title: The Professionally Guided Peer Support Groups for Bereaved by Suicide; Origin: MHCompass; Country: FI; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=162	EU Best Practice Portal
5.2.3	Title: Psychologically Informed Environments; Origin: MHCompass; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=168	EU Best Practice Portal
5.2.4	Title: Zippy's friend; Origin: MHCompass; Country: CZ; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=272	EU Best Practice Portal
5.2.5	Title: Project CuiDando (Caring) – Mobile Unit of Integrated Domiciliary Care in Mental Health; Origin: MHCompass; Country: PT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=186	EU Best Practice Portal
5.2.6	Title: Smartaging Mindbrain; Origin: SCIROCCO; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=138	EU Best Practice Portal
5.2.7	Title: Integrated Care Process for Children with Special Needs (PAINNE); Origin: SCIROCCO; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=124	EU Best Practice Portal
5.2.8	Joint Action ImpleMENTAL (started in October 2021); Link: https://ja-imental.eu/	ja-imental.eu
5.2.9	Title: Icehearts. Country: FI; Link: https://www.icehearts.fi/brief-in-english/	EU Best Practice Portal
5.2.10	Title: "Let's talk about children"; Country: FI; Link: https://mieli.fi/en/front-page/society-and-advocacy/the-effective-child-and-family-work/lets-talk-about-children/	EU Best Practice Portal
Targeted: practices at local or organisational level		
5.2.11	Title: This is Me prevention programme; Origin: MHCompass; Country: SI; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=270	EU Best Practice Portal

5.2.12	MentBest – Transfer of EAAD best practice: four-level intervention concept to improve care for patients with depression and to prevent suicidal behaviour	EU Best Practice: EC Health Programme Database
5.2.13	Title: Adapting and Implementing EAAD 's Best Practice Model to Improve Depression Care and Prevent Suicidal Behavior in Europe; Origin: EAAD-Best; Link: https://eaad-best.eu/about-eaad-best/	EAAD-Best
5.2.14	In ten European countries, the Youth Aware of Mental Health (YAM) programme has been associated with a 55% reduction in incident suicide attempts and 50% fewer cases of severe suicidal ideation after 12 months.	OECD (2021), A New Benchmark for Mental Health Systems: Tackling the Social and Economic Costs of Mental Ill-Health
5.2.15	Title: European Alliance Against Depression-Best project (step-wise intervention programme to tackle depression). Link: Health Programme Database – European Commission (europa.eu)	Health Programme DataBase
Mental health and neurological disorders area 3: Improving timely and equitable access to high quality mental health services		
Large scale: policy options at national or regional level		
5.3.1	Title: Peer2Peer Vocational Training Course; Origin: MHCompass; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=163	EU Best Practice Portal
5.3.2	Title: South London and Maudsley NHS Foundation Trust; Origin: Vulnerable; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=85	EU Best Practice Portal
5.3.3	Title: Mental health care delivery system reform in Belgium; Origin: MHCompass; Country: BE; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=185	EU Best Practice Portal
5.3.4	Title: Cognitive Behavioural Therapy for substance use disorder in individuals with mild intellectual disability; Origin: MHCompass; Country: NL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=188	EU Best Practice Portal
5.3.5	Title: cCBT in Scotland; Origin: SCIROCCO; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=116	EU Best Practice Portal
5.3.6	Title: Mobile Crisis Work: help at home in difficult life situations; Origin: MHCompass; Country: FI; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=165	EU Best Practice Portal
Targeted: practices at local or organisational level		
5.3.7	Title: Recovery: a person-centered approach in health and social services; Origin: MHCompass; Country: DK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=166	EU Best Practice Portal
5.3.8	Title: Promotion of Community Based Mental Health Services; Origin: MHCompass; Country: FR; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=169	EU Best Practice Portal
5.3.9	Title: Project CuiDando (Caring) – Mobile Unit of Integrated Domiciliary Care in Mental Health; Origin: MHCompass; Country: PT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=186	EU Best Practice Portal
Mental health and neurological disorders area 4: Protecting rights, enhancing social inclusion, and tackling stigma associated with mental health problems		
Large scale: policy options at national or regional level		
5.4.1	Title: Joint Experiences and Local Mental Health Systems, third edition 2014-2017; Origin: MHCompass; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=161	EU Best Practice Portal

5.4.2	Title: Technical Assistance to Relevant French Speaking countries in Implementing their Mental Health Local Councils in Coordination with WHO; Origin: MHCompass; Country: FR; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=173	EU Best Practice Portal
5.4.3	Title: Action Platform for the Rights in Mental Health; Origin: MHCompass; Country: EL; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=277	EU Best Practice Portal
5.4.4	Title: Peer2Peer Vocational Training Course; Origin: MHCompass; Country: ES; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=163	EU Best Practice Portal
5.4.5	Title: South London and Maudsley NHS Foundation Trust; Origin: Vulnerable; Country: UK; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=85	EU Best Practice Portal
5.4.6	JA ImplMENTAL – Joint Action on Implementation of best practices in the area of mental health – Transfer of Austrian best practice on suicide prevention “SUPRA”, targeting children/adolescents and adults, incl. older people	EU Best Practice: EC Health Programme Database
5.4.7	Title: Dementia Friendly Communities. (Communities which are 'dementia friendly' can help to support people with dementia to live more independent and fulfilling lives in their own communities); Link: https://webarchive.nrscotland.gov.uk/20210302011848/https://www.actondementia.eu/	2nd Joint Action on Dementia
Mental health and neurological disorders area 5: Implementing national plans for stroke encompassing the entire chain of care, from primary prevention to life after stroke		
Large scale: policy options at national or regional level		
5.5.1	Treatment of acute ischemic stroke with intravenous thrombolytic therapy (N.B. Needs capacity to diagnose ischaemic stroke).	WHO Effective intervention**
5.5.2	Low-dose acetylsalicylic acid for ischemic stroke.	WHO Recommended intervention***
5.5.3	Implementation of Stroke Action Plan for Europe; Link: Public-version-SAP-E-English.pdf (eso-stroke.org)	Suggested by Stroke Alliance for Europe (SAFE) and European Stroke Organisation (ESO)
Targeted: practices at local or organisational level		
5.5.4	Care of acute stroke and rehabilitation in stroke units	WHO Recommended intervention***
Mental health and neurological disorders area 6: Improved screening and monitoring of stroke within primary care		
Large scale: policy options at national or regional level		
5.6.1	Increasing Atrial Fibrillation detection by leveraging systematic screening with Electrocardiogram (Sweden)	Suggested by EU Structural Heart Disease Coalition
Mental health and neurological disorders area 7: Increasing awareness of stroke and recognition of signals of (ischemic) stroke among the general population and vulnerable populations in particular		

Large scale: policy options at national or regional level		
5.7.1	FAST heroes – Global	Suggested by Stroke Alliance for Europe (SAFE) and European Stroke Organisation (ESO)
Targeted: practices at local or organisational level		
5.7.2	Stroke Owl Project – Germany	Suggested by Stroke Alliance for Europe (SAFE) and European Stroke Organisation (ESO)
Mental health and neurological disorders area 8: Changing attitudes towards dementia and tackling stigma associated with dementia		
Large scale: policy options at national or regional level		
5.8.1	Joint Action on Dementia	
	EU Best Practice: EC Health Programme Database	
5.8.2	Title: Together dementia friendly ('Samen dementievriendelijk'); (National strategy to raise awareness about dementia and on how to interact with people with dementia); Country: NL; Link: https://www.samendementievriendelijk.nl/	Alzheimer Netherlands
5.8.3	Title: National Dementia Strategy for Germany; Link: https://www.nationale-demenzstrategie.de/english	Suggested by Germany
Targeted: practices at local or organisational level		
5.8.3	The mDementia programme (Provides health information to those at risk of developing dementia and to support carers of people living with dementia, leveraging mobile technologies); Link: https://www.who.int/publications/i/item/9789240019966	WHO
Mental health and neurological disorders area 9: Prevention and early detection of dementia		
Large scale: policy options at national or regional level		
5.9.1	Title: Smartaging Mindbrain; Origin: SCIROCCO; Country: IT; Link: https://webgate.ec.europa.eu/dyna/bp-portal/practice.cfm?id=138	EU Best Practice Portal
Mental health and neurological disorders area 10: Implementing person-centred integrated care models, to better manage neurological disorders and support the quality of life of patients and their families		
Large scale: policy options at national or regional level		
5.10.1	ParkinsonNet: A Low-Cost Health Care Innovation With A Systems Approach From The Netherlands	https://www.parkinsonnet.com/
5.10.2	The Mental Health Gap Action Plan (mhGAP) is an information package for prioritised mental, neurological and substance use disorders, including dementia. It's composed of interventions for prevention and management for each condition. Link: https://apps.who.int/iris/bitstream/handle/10665/259161/WHO-MSD-MER-17.6-eng.pdf?sequence=1	WHO

* WHO Best Buy = effective intervention with cost effectiveness analysis (CEA) ≤ I\$100 per DALY averted in LMICs

** WHO Effective intervention = effective interventions with CEA >I\$100 per DALY averted in LMICs *** WHO Recommended intervention = recommended based on WHO guidance, no CEA available

Annex 6 - Overview of EU initiatives to support improvement in health and healthcare

The European Commission has launched the Healthier Together Initiative to support the EU countries in reducing the burden of non-communicable diseases (NCDs). This Initiative will reinforce EU countries' and stakeholders' action on NCDs, focusing on prevention.

Legal and financial instruments managed by DG SANTE can encourage and assist EU countries to transfer best practices, develop guidelines, roll out innovative approaches, etc., in the five strands of the Initiative. In different and complementary ways, other Commission Departments may also contribute to support EU countries' action to generate more impact to reduce the NCDs burden.

Initiatives on Non-communicable diseases: EC intersectoral policy and action impacting the five strands of NCDs

Initiatives on Non-communicable diseases: EC intersectoral policy and action impacting the five strands of NCDs						
1. HEALTH DETERMINANTS						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	"Healthy workers, thriving companies - a practical guide to wellbeing at work"	Guide to prevent and manage work-related psychosocial risks and musculoskeletal disorders. European workers report these two issues as the main causes of work-related ill health.		EMPL		Available
1.1 Control smoking of tobacco and related products among the general population						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	The Tobacco Products Directive 2014/40/EU	The Tobacco Products Directive 2014/40/EU concerns the manufacture, presentation and sale of tobacco and related products aiming at facilitating smooth functioning of the internal market, protecting people's health – particularly of the youth – and meeting the EU obligations under the WHO Framework Convention on Tobacco Control (WHO FCTC). For most of its provisions, the Directive became applicable in May 2016. It introduced larger combined health warnings, an EU-wide		SANTE		

		track and trace system, a mandatory database of ingredients, regulated electronic cigarettes, and banned characterising flavours from cigarettes and roll your own tobacco.				
2.	Joint action on Tobacco control	The enhancement of regulatory vigilance on tobacco product evolution and development will protect European public health through the increased awareness of product related data including, but not limited to, ingredients, additives, design parameters, toxicological data and emissions, which will also set standards for product placement in the EU market.		SANTE		
a. Prevent children, adolescents, and young adults from starting to smoke tobacco and related products						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
	Place holder					
b. Reduce harmful consumption of alcohol among the general population						
N°	Specific policy/action	Contribution	Financial instruments and budget	Lead DG	Indicative timeline	State of play
1	Developing and Extending Evidence and Practice from the Standard European Alcohol Survey (DEEP SEAS)	Results from the Standard European Alcohol Survey could contribute to improved insights and evidence on the consumption of alcohol.	Third health Programme	SANTE		
2	Foetal Alcohol Reduction and exchange of European knowledge after SEAS (FAR SEAS)	Insights on best practices to reduce alcohol-related harm, focusing on alcohol problems faced by women, and evidence and action to reduce prenatal exposure to alcohol and associated harm.	Third health Programme			
3	Alcohol Harm – Measuring and Building Capacity for Policy Response and Action (ALHAMBRA project)	Studies and capacity building activities to reduce alcohol related harm.		SANTE		Launched in December 2020
4.	Europe's Beating Cancer Plan	Makes Alcohol Policy Key Element of Cancer Prevention.	EUR 4 billion of funding, including EUR 1.25 billion from	SANTE	2021-2025	Launched in 2021

		See further description under “6. Cross-cutting initiatives (relevant for all strands)”	the future EU4Health Programme.			
c. Prevent the consumption of alcohol among children, adolescents, and young adults						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
	Place holder					
d. Reduce unhealthy eating, physical inactivity, overweight and obesity among the general population						
N°	Specific policy/action	Contribution	Financial instruments and budget	Lead DG	Indicative timeline	State of play
1.	Integrated surveillance system to prevent and reduce diet-related Non-Communicable Diseases (Horizon Europe, Cluster 6 Work Programme 2021-2022)	Improved public health and public awareness on a healthier diet will reduce NCDs, in particular in vulnerable population groups across Europe.	Total indicative budget for the topic is EUR 11.00 million	RTD/REA	2021-2022	
2.	Study on ‘Mapping of pricing policies and fiscal measures applied to foods high in sugar, fat and salt and, non-alcoholic & alcoholic beverages.’	Pricing policies and fiscal measures could help improve people’s diet and hence promote better health and prevent NCDs.		SANTE/The Consumer, Health, Agriculture and Food Executive Agency (CHAFEA)	The report is envisaged to be delivered by Q2/Q3 of 2022.	
3.	Food And Beverage Labels explorer (FABLE)	FABLE will allow policymakers, researchers and the public to explore, interact with, and visualise the information collected from food labels	Third health Programme	JRC		

		across the EU (i.e., energy content; content of sugars, total and saturated fats, salt, fibre; ingredients).				
4.	Implementing effective health Interventions (Joint Action best ReMap)	Healthier offer of healthier option of processed food (by reducing salt, sugar and fat from the processed foods).	Third health Programme	SANTE		
5.	European Standardised Monitoring system for the reformulation of processed foods (Joint Action best ReMap)	Reduce unhealthy (digital) food marketing to children and adolescents and to use already developed tools for harmonised monitoring of (digital) marketing		JRC		
6.	The HealthyLifestyle4All Initiative two-year campaign The HealthyLifestyle4All Initiative Sport (europa.eu)	Reducing the burden of NCDs by linking sport and active lifestyles with health, food and other policies.	-	SANTE	2021-2023	Presented September 2021
7.	Innovation Networks for Scaling Active and Healthy Ageing	Promotes active and healthy ageing. The goal is to enable innovation in healthcare by addressing national and international barriers while enhancing the European Innovation Partnership on Active and Healthy Ageing (EIP AHA) ecosystem.	EUR 2 million	CNECT	January 2021 - December 2022	
8.	EU organic awards	Promotes and highlight excellence in organic production that can contribute to improve access to healthy and sustainable diets.	The awards are symbolic, not monetary.	AGRI		The application period was open from 28 March till 8 June 2022.
10.	The EU Code of Conduct on Responsible Food Business and Marketing Practices (part of Farm to Fork Strategy)	The Code includes a set of seven aspirational objectives, each with specific targets and a list of indicative, tangible and measurable actions, which contribute to a food environment that makes healthy and sustainable food choices easier. These actions can be directly relevant and implementable within their own operations or may encourage collaboration with industry peers and other food system stakeholders (such as farmers and consumers) to make similar changes.		SANTE	2021-ongoing	Entered into force on 5 July 2021.
e. Reduce unhealthy eating, physical inactivity, overweight and obesity among children and adolescents						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play

1.	Erasmus + (EU's programme to support education, training, youth and sport in Europe.)	Reducing the burden of NCDs by supporting education, training, youth and sport.	EUR 26.51 billion	EAC	2021-2027	
2.	Science and Technology in childhood Obesity Policy (STOP) funded from European Union's Horizon 2020	STOP project will generate scientifically sound, novel and policy-relevant evidence on the factors that have contributed to the spread of childhood obesity in European countries and on the effects of alternative technological and organisational solutions and policy options available to address the problem.	The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774548	RTD/REA	2018-2022	
3.	Farm to Fork Strategy	See under 6.				
4.	European Child Guarantee	See under 6.				
5.	Europe's Beating Cancer Plan	See under 6.				
1.7 Creating healthy environments						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	The EU Urban Mobility Framework	Aims to make urban mobility more sustainable, smart, and healthy. Prevent NCDs by contributing to create healthier and safer mobility and support active mobility modes, such as walking and cycling.		MOVE		Presented December 2021
2.	Zero Pollution Action Plan and the European Green Deal: Align EU's air quality standards with WHO guidelines	Improve air quality to reduce risks related to exposure of air pollution, focus on cardiovascular and respiratory disease.		ENV		
3.	Zero Pollution Action Plan: Flagship 1 of the ZPAP on reducing health inequalities through zero pollution	This flagship aims to regularly feed the Cancer Inequalities Registry and the Atlas of Demography with pollution monitoring and outlook data and assess the need to have an Inequalities Registry for other pollution-related diseases by 2024.		ENV		
4.	Zero Pollution Action Plan: Pollutant lists and corresponding regulatory standards updated in	Protect public from the risks related to exposure of air pollution and hence prevent NCDs (especially cardiovascular and respiratory disease).		ENV		

	Environmental Quality Standards, Groundwater and Water Framework Directives limiting carcinogenic pollutants					
5.	Zero Pollution Action Plan: Explore removal of carcinogenic chemicals in revision of Urban Waste Water Treatment Directive	Protect public from the risks related to exposure of carcinogenic chemicals.		ENV		
6.	Zero Pollution Action Plan: Promotion of depolluted and re-naturalised sites as potential public green areas	Promote better mental and physical well-being, and protect public from the risks related to exposure of pollution.		ENV		
7.	Article 5, on adaptation to climate change, of the European Climate Law	The running of the observatory, and some actions carried out under its roof, are supported by EU4Health, LIFE, and Horizon Europe	-	ENV		Adopted in July 2021
8.	European Climate and Health Observatory	The Observatory identifies, develops and makes available risk indicators, risk assessment tools, useful background knowledge, actionable solutions and good practices on climate-related health risks. Work in 2021 and 2022 concentrated on two climate-related health risks • Climate-sensitive infectious disease threats (such as posed by vector-borne and waterborne diseases) • Heat stress (leading to death, ill health and reduced work capacity; and exacerbated by air pollution and the projected increase of pollen and other allergens)		SANTE and CLIMA		

2. DIABETES

N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
	Place holder				

2.1 Prevent the onset of type 2 diabetes among high-risk populations					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	mHealth programme: knowledge tool in support of intervention-specific – Type 2 diabetes	The tool can be used to identify, collect and organise the available knowledge for the iterative development of national or large-scale programmes for the prevention and management of type 2 diabetes, supported by mobile solutions, using a person-centred approach. The tool supports the match of personalised needs with available solutions.	CNECT		Available
2.2 Reduce undiagnosed diabetes by raising awareness, targeted screening or early detection approaches					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Health Promotion and Disease Prevention Knowledge Gateway	See under 6.	SANTE		
2.	Disease Gateway for disease monitoring purposes utilising data from disease registries across the EU	The initiative will collect data from the various data sources, clean and harmonise them and derive indicators with particular attention to ensuring the necessary level of quality, starting from diabetes and possibly expanding to Alzheimer's disease and long COVID.	SANTE/E CDC		
3.	Europe's Beating Cancer Plan provides evidence-based recommendations for screening and diagnosis and a voluntary quality assurance scheme covering the entire care pathway	Provide evidence-based and independent guidance on screening and care to health care providers/patients, The methodology used to create the recommendations based on latest scientific evidence could be adapted to other NCDs.	SANTE		
3. CARDIOVASCULAR DISEASES					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
	Place holder				
3.1 Prevention of the onset and progress of cardiovascular diseases					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play

1.	EU Strategic Framework on Health and Safety at Work 2021-2027	A healthy workforce is the fundamental basis of a strong and resilient economy and society. Encouraging healthy lifestyle choices in the workplace can significantly reduce the incidence of non-communicable diseases (such as obesity, cardiovascular diseases and diabetes). The strategy aims to improve working conditions and health promotion at work for people with NCDs. The initiative will among other things contribute with research and data collection on occupational circulatory diseases as well as health promotion at work.	EMPL	2021-2027	
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3.5 Increase awareness of the impact of CVD

N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Health Promotion and Disease Prevention Knowledge Gateway	See under 6.	SANTE		

4. CHRONIC RESPIRATORY DISEASES

4.1 The prevention of the onset and progress of chronic respiratory diseases, in particular COPD, which may include the prevention of tobacco use; exposure to second-hand tobacco smoke; prevention of exposure to occupational chemicals and dust; reduction of indoor and outdoor pollutants

N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work	Protect workers from the risks related to chemical agents at work.	EMPL	EU works on updating the directive	
2.	Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work	Protect workers from the risks related to exposure to carcinogens or mutagens at work	EMPL	EU works on updating the directive	
3.	Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work	Protect workers from the risks related to exposure to asbestos at work.	EMPL	EU works on updating the directive	
4.	Directive 89/654/EEC – workplace requirements	Minimum requirements for workplaces on ventilation of enclosed workplaces to secure sufficient fresh air in enclosed workplaces.	EMPL		Adopted

5. MENTAL HEALTH AND NEUROLOGICAL DISORDERS

N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	E-tools and guidance for risk assessments related to green and digital jobs and processes, including psychosocial and ergonomic risks and initiatives investing in health at the workplace (EU Strategic Framework on Health and Safety at Work 2021-2027)	Practical tool to help both employers and workers, particularly of small businesses, contribute to prevent NCDs (e.g., understand and manage stress and psychological risks).	EMPL in cooperation with EU-OSHA		Available
2.	Initiative on research. The EU strategic framework on health and safety at work 2021-2027	Results from ongoing research on occupational safety and health will provide valuable input, for example on mental health at work.	EU-OSHA		
3.	The H2020 i-PROGNOSIS project: Early detection of Parkinson's Disease and enhanced supportive interventions	The project has built early detection test for Parkinson's Disease (PD) and designed innovative interventions using the potential of new technologies such as a smart phone and smart watch. The project developed the i-PROGNOSIS app – a research instrument to unobtrusively collect smartphone-based interaction data and share this information with researchers for developing tests for the early detection of PD. They furthermore designed PD-related interventions which have been incorporated in the i-PROGNOSIS platform. These include a personalised game suite which consists of ExerGames for reinforcing muscle tension and re-establishing walking posture, DietaryGames for adapting dietary habits, EmoGames for encouraging facial expressions and H/V Games for handwriting correction. Moreover, the platform contains assistive interventions for voice enhancement and gait rhythm guidance.	CNECT	February 2016 – January 2020	Available
a. Supporting favourable conditions for mental health and increasing resilience					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Child Guarantee	See under 6.	EMPL	Adopted in June 2021	EU countries to deliver national action plans

					by 15 March 2022
2.	Long-Term Care Initiative ('European Care Strategy'), as part of European Pillar of Social Rights	EU-level action to strengthen not only long-term care, but also early childhood education and care, as envisaged under the European pillar of social rights. Envisaged to help strengthen gender equality and social fairness. Reviewing 'Barcelona targets' on provision of childcare and as such supportive to young families. See also under 4.	JUST, in synergy with EMPL	Announced in SOTEU, Sept 2021, to be adopted in Q3 2022	Call for evidence and feedback closed late March 2022
3.	EU Strategy on the Rights of the Child	Six thematic areas include the right of children to realise their full potential no matter their social background (also addressing children's mental health); the right of children to be free from violence (including reference to child protection issues and prevention of domestic violence); and the right of children to safely navigate the digital environment and harness its opportunities (with reference to 'Better internet for Kids' initiative)	JUST	Adopted in March 2021	
4.	EU Strategic Framework on Health and Safety at Work (2021-2027)	Sets out the key priorities and actions necessary for improving workers' health and safety, strengthening the focus on psychosocial risks, including: modernising the OSH legislative framework related to digitisation (by reviewing the Workplaces Directive and the Display Screen Equipment Directive); Healthy Workplaces campaign 2023-2025 on creating a safe and healthy digital future covering psychosocial and ergonomic risks in particular; non-legislative EU-level initiative related to mental health at work that assesses emerging issues related to workers' mental health and puts forward guidance for action before the end of 2022; follow-up to the European Parliament Resolution on the right to disconnect	EMPL		Adopted June 2021
5.	New European Strategy for a Better Internet for Kids (BIK+)	To protect against negative impact (excessive/abusive) internet use (e.g., cyberbullying, exploitation, misinformation); support mental health and psychosocial well-being via the Safer Internet Centres and in particular their helplines – https://digital-strategy.ec.europa.eu/en/policies/safer-internet-centres	CNECT	To be adopted in Q2 2022 See https://ec.europa.eu/info/law/better-regulation/for-roadmaphttps://ec.europa.eu/info/law/better-regulation/for-roadmap	

6.	Revision Display Screen Equipment (DSE) Directive, see also under EU Strategic Framework on Health and Safety at Work (2021-2027)	Protect against negative impacts on workers' mental health and wellbeing	EMPL		Study to identify and assess options to revise the Directives ongoing, final report July 2022
7.	European Education Area: Pathways to School Success	Aims at developing, in cooperation with EU countries, policy guidance on reducing low achievement in basic skills and increasing secondary educational attainment. Will also address positive mental health and prevention of mental health problems for pupils (see under 4.2) and set up expert group on well-being at school. Mental health and well-being in education will be some of the areas addressed by the expert group for creating supportive learning environments for groups at risk of underachievement and supporting well-being at school.	EAC	Council Recommendation expected in 2022	Expert group: call for interest published in 2022, operational from Q3 2022
8.	Mini-Toolkit: Use of the European Social Fund (ESF) for actions to combat poverty and social exclusion of children	Designed for those managing or implementing the ESF, including managing authorities, intermediate bodies, relevant ministries, public bodies with responsibility for protecting children, stakeholders (in particular children's organisations). Also includes examples on how these instruments can be used to fund early years and family support services. Available on: https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8414&furtherPubs=yes	DG EMPL	Published in August 2021	
9.	Citizens, Equality, Rights and Values (CERV) programme, see 1_en_annexe_acte_autonome_part1_v8.pdf (europa.eu) for 2021-22 work programme	'Daphne' programme pillar aiming at fighting violence, including gender-based violence and violence against children	JUST		Call for proposals under 2022 work programme closed on 26 April 2022
10.	Commission expert group on the impact of the COVID-19 pandemic on gender equality in EU R&I	To focus on the consequences of the COVID-19 crisis and the pandemic containment measures put in place at institutional, national and EU level, on the work and productivity of women researchers and on gender equality, to develop policy recommendations to mitigate	RTD		Kick off meeting 15 March 2022

		any negative impact on women researchers and strengthen gender equality. Will include a focus on work-life balance and wellbeing.			
11.	European Platform on Combatting Homelessness (deliverable under European Pillar of Social Rights Action Plan)	To ensure concrete progress in EU countries in the fight against homelessness. It offers an opportunity to engage and work with local actors, including cities and service providers. This will enable all actors to better exchange their knowledge and practices, and identify efficient and innovative approaches, to make progress on eradicating homelessness. https://ec.europa.eu/social/BlobServlet?docId=25258&langId=en	EMPL		Work Programme 2022-2024 endorsed on 28 Feb 2022
12.	EU Programme for Employment and Social Innovation (EaSI)	Financing instrument under ESF+ to promote a high level of quality and sustainable employment, guaranteeing adequate and decent social protection, combating social exclusion and poverty and improving working conditions. Also, to support social inclusion and social innovation.	EMPL		2022 AWP adopted on 8 Dec 2021
b. Promoting mental well-being and preventing mental health disorders					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	ImpleMENTAL Joint Action on mental health: https://ja-imental.eu/	Prevention of suicide by implementing (elements of) Austrian national programme in 14 countries	SANTE	Oct 2021-2024	ongoing
2.	European Alliance Against Depression (EAAD) – Best project	Prevention of depression and suicide by implementing multi-level intervention programme in eight different countries	SANTE	April 2021-2024	ongoing
3.	EU Award 2021 rewarding community-based initiatives alleviating the mental health impact of COVID-19.	Awarded initiatives can include actions raising awareness, tackling prejudice and/or stigma, bridging or complementing service gaps and/or delays that have arisen from disrupted mental health service provision as a consequence of the pandemic	SANTE		Award ceremony too place on 4 May 2022
4.	e-Guide to manage stress E-guide to managing stress and psychosocial risks Safety and health at work EU-OSHA (europa.eu)	Practical tool to help both employers and workers, particularly of small businesses, better understand and manage stress and psychosocial risks.	EMPL in cooperation with EU-OSHA		available
5.	Online wiki on mental health at work https://oshwiki.eu/wiki/Mental_health_at_work	Information resource on mental health at workplace and how to promote it	EMPL in cooperation with EU-OSHA		

6.	Expert Panel on effective ways to invest in health: Opinion on supporting mental health of health workforce and other essential workers' 028_mental-health_workforce_en.pdf (europa.eu)	Reflected on factors influencing the mental health of health workforce and (other) essential workers, provides recommendations to strengthen this	SANTE	Opinion adopted in October 2021	finished
7.	Urban Agenda for the EU: Partnership on Inclusion of Migrants and Refugees: action on "Improving the prevention, early identification, and treatment of mental health concerns among migrants and refugees".	Understanding success factors of practices/strategies for the prevention of mental health conditions and for the promotion of mental health among diverse populations. See also under 2.	HOME	Q4 2021 - Q1 2022	Round table under preparation
8.	The App "Nevermind": Prevention and early diagnosis of depression, in particular in treatment of severe somatic diseases	The app empowers people to better manage their mental health, combined with the power of data and backed-up by health professionals. The app and smart sensors allow people to manage their mental health with practical exercises and tips. The ICT-enabled platform is one of the few available eHealth interventions that has proven to effectively decrease depression symptoms in patients with severe somatic diseases.	CNECT	January 2016 – September 2020	Available
9.	Pathways to School Success	Will address positive mental health and prevention of mental health problems for pupils (see also under 4.1). Expert group to develop guidelines, also on 1) promoting mental health and well-being through the curriculum; 2) whole school approach to violence and bullying prevention; and 3) support the well-being and mental health of teachers	EAC	Council Recommendation expected in 2022	Expert group: call for interest published in 2022, operational from Q3 2022
10.	BOOST (Building social and emotional skills to boost mental health resilience in children and young people in Europe) project (Horizon 2020)	Developing a holistic population-based approach to promote mental well-being in primary school children by building social and emotional (SEL) learning capacity of school staff, and providing schools with a model for service delivery to ensure a whole-school-approach fitting the needs and resources of the school. https://www.boostproject.eu/	RTD/HaD EA	January 2018 – June 2023	
11.	RefugeesWellSchool project (Horizon 2020)	Implementing and evaluating impact of five preventive school-based interventions in promoting refugee and migrant adolescents' mental well-being: school mediation	RTD/HaD EA	January 20218 –	

		intervention, classroom drama therapy, social support groups in refugee classes, support networks on school level, and teachers' training. https://refugeeswellschool.org/		end-March 2022	
12.	EU4Health annual work plan 2022: call for projects to support the mental health of children, young people and their families	To implement two practices: 1) a sport-based support programme to improve life skills and social, psychological and emotional resources among socially vulnerable children and adolescents, and 2) a two-step intervention to support mental health and wellbeing of young people and their families in vulnerable situations.	SANTE	Contracts to be signed before end 2022	Call closed on 24 May 2022
13.	Erasmus+ (EU programme for education, training, youth and sport): Key Action 2 (Cooperation among organisations and institutions)	Supported actions are expected to trigger modernisation and reinforce the response of education and training systems and youth policies to the main challenges of today's world, which include mental health and well-being	EAC		
c. Improving timely and equitable access to high quality services					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Strategy for the rights of persons with disabilities 2021-2030	Takes account of the diversity of disability comprising long-term physical, mental, intellectual or sensory impairments. Includes actions and initiatives on equal access to all health services (see below).	EMPL		
2.	Framework for Social Services of Excellence for persons with disabilities	Under the 'Strategy for the rights of persons with disabilities 2021-2030', this is to improve service delivery and enhance the attractiveness of jobs in this area, through upskilling and reskilling of service providers.	EMPL	To be delivered in 2024	
3.	Technical Support Instrument: Country support for (various) structural reforms in the area of healthcare	Equal access to affordable and quality health care and long-term care, also as regards mental health services	DG REFORM		Annual cycle. Deadline proposals for 2022 was on 31 October 2021
4.	ImpleMENTAL Joint Action on mental health: https://ja-imental.eu	System reform to support community-based services by implementing (elements of) Belgian reform in 11 countries	SANTE	Oct 2021-24	ongoing
5.	Pact for Skills initiative	Promotes Joint Action to maximise the impact of investing in improving existing skills (upskilling) and training in new skills (reskilling), also in the health and social care sector, and to educate the next generation of health workers and review their training curricula. Strong focus on digital skills.	EMPL		Launched in Nov 2020

		Financial instruments, such as the Recovery and Resilience Facility, ESF+, Erasmus+, REACT-EU, Digital Europe Programme or Invest EU can support up- and reskilling of healthcare workers as part of the Pact			
6.	EU Award 2021 rewarding community-based initiatives alleviating the mental health impact of COVID-19	See under 5.2.	SANTE		
7.	European Migration Network mapping exercise the gather overview of policies in place in EU countries to provide effective access to and provision of mental health care to migrants and refugees	To underline current challenges and the practices developed to address them. To contribute to the development of better mental health policies towards migrants and refugees in place in EU countries.	DG HOME	Q4 2021-Q1 2022	ongoing
8.	Urban Agenda for the EU: Partnership on Inclusion of Migrants and Refugees: action on "Improving the prevention, early identification, and treatment of mental health concerns among migrants and refugees"	Improve awareness on barriers/bottlenecks as regards early identification and treatment of mental health concerns amongst refugees and migrants; improve European cooperation on their treatment from moment of arrival to eventual transit and relocation to their new destination within Europe.	DG HOME	Q4 2021 - Q1 2022	Round table under preparation
9.	Asylum, Migration and Integration Fund (2021-2027)	The Fund aims to further boost national capacities and improve procedures for migration management, as well as to enhance solidarity and responsibility sharing between EU countries. Actions related to psycho-social assistance can be supported under the Thematic Facility Work Programme 2021-2022	DG HOME		Subsequent calls open from 26 January - 12 October 2022
10.	Long Term Care Initiative ('European Care Strategy'), as part of European Pillar of Social Rights. Chapeau Commission Communication with separate Council Recommendation(s).	To focus on service access and affordability, as well as on prevention and workforce issues, also as regards mental health services. Long term residential and home services; support for informal carers (?). Not yet clear whether long-term mental health services are included in scope. Also reviewing 'Barcelona targets' on provision of childcare and as such supportive to young families (see under 1).	EMPL, in synergy with JUST	Q3 2022	Announced at SOTEU, Sept 2021

d. Protecting rights, enhancing social inclusion, and tackling stigma

N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Strategy for the rights of persons with disabilities 2021-2030	Takes account of the diversity of disability comprising long-term physical, mental, intellectual or sensory impairments Aims to ensure that persons with disabilities in Europe: 1) enjoy their human rights, 2) have equal opportunities, 3) have equal access to participate in society and economy, 4) are able to decide where, how and with whom they live, 5) can move freely in the EU regardless of their support needs, and 6) no longer experience discrimination. Includes actions and flagship initiatives in various domains including around accessibility, quality of life (including de-institutionalisation, social protection and non-discrimination at work) and equal participation, as well as equal access to all health services.	EMPL		
2.	Guidance as regards improvements on independent living and inclusion in the community services	Recommendations to EU countries within Framework for Social Services of Excellence for persons with disabilities, in order to enable persons with disabilities to live in accessible, supported housing in the community, or to continue living at home (including personal assistance schemes).	EMPL	2023	
3.	EU Charter of Fundamental Rights	Action on involuntary placement and treatment of persons with mental health problems			
4.	EU Award 2021 rewarding community-based initiatives alleviating the mental health impact of COVID-19	See under 5.2	SANTE		
5.	Involvement in awareness campaigns of others, e.g., FIFA, UNICEF		SANTE		
6.	Citizens, Equality, Rights and Values (CERV) programme, see 1_en_annexe_acte_autonomie_part1_v8.pdf (europa.eu) for 2021-22 work programme	Promoting rights, non-discrimination, and equality under its pillar 'Equality, Rights and Gender Equality'.			
7.	European Skills Agenda	Development of national skills strategies that cover the specific needs of persons with disabilities and that ensure equal access to education and to the labour market			

8.	Social Economy Action Plan	To enhance social investment, support social economy actors and social enterprises	EMPL		Adopted Dec 2021
<i>e. Changing attitudes and tackling stigma associated with dementia</i>					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	Citizens, Equality, Rights and Values (CERV) programme, see 1_en_annexe_acte_autonomie_part1_v8.pdf (europa.eu) for 2021-22 work programme	Promoting rights, non-discrimination, and equality under its pillar 'Equality, Rights and Gender Equality'			
2.	EU Programme for Employment and Social Innovation (EaSI)	Financing instrument under ESF+ to promote a high level of quality and sustainable employment, guaranteeing adequate and decent social protection, combating social exclusion and poverty, and improving working conditions. Also, to support social inclusion and social innovation	EMPL		2022 AWP adopted on 8 Dec 2021
3.	Strategy for the rights of persons with disabilities 2021-2030	See under 5.4	EMPL		
4.	Green Paper on Ageing	Focuses on both the personal and wider societal implications of ageing. These include issues related to equal and inclusive societies, and long-term care for older people.	EMPL	Published in January 2021	
<i>f. Prevention and early detection of neurological diseases, in particular Alzheimer's disease and dementia</i>					
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play
1.	EBRAINS research infrastructure (support from Horizon 2020 & Horizon Europe)	EBRAINS is a digital research infrastructure supported by Horizon 2020 and Horizon Europe. It was created by the EU-funded Human Brain Project, that gathers an extensive range of data and tools for brain-related research, digital neuroscience, brain medicine, and brain-inspired technologies: https://ebrains.eu/	CNECT		
2.	RADAR-AD project (Remote Assessment of Disease and Relapse – Alzheimer's Disease) (Horizon 2020)	RADAR-AD's digital platform can track changes in cognitive and functional abilities. The platform has been developed for early diagnosis of Alzheimer's disease: https://cordis.europa.eu/project/id/806999	RTD/ IMI		01/01/2019 - 30/06/2022

3.	AMYPAD project (Amyloid imaging to prevent Alzheimer's disease) (Horizon 2020)	AMYPAD researchers showed that a 'visual read' of PET scans using radioactive diagnostic tracer flutemetamol can go beyond simple yes-or-no determination of the presence of Alzheimer's hallmark protein. It can also reveal the extent and location of amyloid. https://cordis.europa.eu/project/id/115952 https://www.imi.europa.eu/news-events/newsroom/alzheimers-visual-assessment-18fflutemetamol-pet-can-reveal-not-only-presence	RTD/ IMI		01/01/2019 - 30/06/2022	
4.	Digitising Europe Industry Large-scale Pilots	See under 6.		CNECT		
g. High-quality care in managing neurological diseases and supporting quality of life						
N°	Specific policy/action	Contribution	Lead DG	Indicative timeline	State of play	
1.	Guidance as regards improvements on independent living and inclusion in the community services	Recommendations to EU countries within Framework for Social Services of Excellence for persons with disabilities, in order to enable persons with disabilities to live in accessible, supported housing in the community, or to continue living at home (including personal assistance schemes).	EMPL	2023		
6. CROSS CUTTING INSTRUMENTS (RELEVANT FOR ALL STRANDS)						
6.1. Policy						
N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	Child Guarantee	Guaranteeing the access of children in need (in particular those who experience social exclusion due to poverty or other forms of disadvantage) to a set of key services that may help to bolster resilience and mental well-being: early childhood education and care; education (including school-based activities); healthcare; nutrition; and housing		EMPL	Adopted in June 2021	EU countries to deliver national action plans by 15 March 2022
2.	Better Internet for Kids Strategy	Fight all online child sexual abuse, raise awareness of and build capacity around cyberbullying, recognition of fake news, and promotion of healthy and responsible behaviour online – for children as well as parents, teachers and other professionals. Support EU countries, through the Joint Action on Implementation of Validated Best Practices in Nutrition, in drafting a voluntary code of conduct to reduce online marketing to children of products high in fat, salt and sugar.		CNECT		Updated strategy to be adopted by the end of 2022

3.	EU Pharmaceutical Strategy for Europe	The strategy aims at addressing unmet needs by investing in research and innovation for new treatments, vaccines and antibiotics. Also, it aims at securing access to affordable medicines through EU-level cooperation on pricing and reimbursement policies. Moreover, it addresses digitisation and new technologies by investing in research, development and manufacturing of new medicines.		SANTE		
4.	European Cancer Inequalities Registry (Europe's Beating Cancer Plan)	Mapping provides overview of disparities between countries for health determinants (i.e., smoking, obesity, physical inactivity), which are shared by cancer and other NCDs (diabetes, CVD, respiratory diseases).		SANTE	Europe's Beating Cancer Plan	Launched February 2022
5.	1+ Million Genomes Initiative (1+MG)	Genomics has the potential to revolutionise healthcare in many ways. It could lead to the development of more targeted personalised medicines, therapies and interventions. It could also enable better diagnostics, boost prevention and make more efficient use of scarce resources. From cancer to rare diseases to neurological disorders and prevention, genomics can greatly improve health conditions of EU citizens. Equally important, genomics has the potential to improve the effectiveness, accessibility, sustainability and resilience of health systems in the European Union.	Digital Europe: EUR 20 million grant Horizon 2020: EUR 4 million coordination and support action Recovery and Resilience Facility: contributions to the Genome of Europe (approx. EUR 15 million total)	CNECT	Genomics Data Infrastructure by 2026	Launched in 2018, supported by the B1MG project, deployment of a data infrastructure will be launched in late 2022
6.	Digitising Europe Industry Large-scale Pilots	H2020 Large-scale pilot projects in the healthcare sector on reference architectures, digital tools and shared platforms, including on NCD: https://www.opendei.eu/healthcare-sector/ An example: TeNDER (end of 2019 to the end of 2022): TeNDER will develop an integrated care model to manage multi-morbidity in patients with Alzheimer's disease (and other forms of dementia), Parkinson's disease, and cardiovascular disease. Website: https://www.tender-health.eu/		CNECT		
7.	Virtual Human Twin	The aim is to develop dynamic computational models of an individual's physiology to advance personalised medicine,	Digital Europe: Ecosystem for digital twins in healthcare budget EUR 5 million	CNECT	2022-2027	

		from early prediction and prognosis, targeted risk prevention and diagnosis to tailored treatment. Digital Europe Programme Call for proposals 2021 on an ecosystem for digital twins in healthcare will support ecosystem-building activities, deliver a roadmap and a repository of virtual twin models, complemented by a blueprint of a simulation platform; Horizon Europe Cluster Health Call for proposals 2022 on computational models for new patient stratification strategies will deliver computational models for new patient stratification strategies.	Horizon Europe: New patient stratification strategies: budget EUR 50 million			
8.	The HealthyLifestyle4All	The HealthyLifestyle4All is the European Commission's two-year campaign that aims to link sport and active lifestyles with health, food and other policies. It showcases the European Commission's commitment to promoting healthy lifestyles for all, across generations and social groups, noting that everyone can benefit from activities that improve health and well-being. Central to the initiative is a pledge board. DG SANTE has submitted three pledges so far.	Erasmus+, Horizon+	DG EAC	2021-2023	Launched on 23 September 2021 in Bled at the Opening of the European Week of Sport
9.	Joint action on implementation of digitally enabled integrated person-centred care	The JADECARE joint action on the implementation of digitally enabled integrated personally centred care. The joint action involves partners from 17 countries, with the goal of transferring four demonstrated good practice models of integrated care across different cultural and local contexts. The good practice models to be transferred include: • the Basque health strategy on ageing and chronicity: Integrated care (Spain) • the Catalan Centre for Open Innovation on ICT-supported integrated care services for chronic patients (Spain) • the OptiMedis Model – integrated population-based care (Germany) • the RSD digital roadmap towards an integrated health care sector (Denmark).		SANTE	2020-2023	

		The Joint Action will support other health authorities in achieving the transition towards a more digital and person-centred care. Types of contribution: plans/tests; information, technical support				
10.	Active and Assisted Living Joint R&D Programme	AAL Programme supports digital solutions for healthy ageing. The initiative is based on Article 185 of the Treaty on the functioning of the European Union. It runs under an indirect management scheme with the EU countries with an intermediate body – the AAL Association – established to manage the funds of the programme.	50% EU co-financing. EU's financial contribution is set to max. EUR 175 million.	CNECT	2014-2027	
11.	eHACTION	Joint Action to support the eHealth Network. Provides strategic guidance and tools to empower patients and overcome implementation challenges of eHealth tools. Develops strategic guidance and tools in the following Priority Areas: - Empowering people: Enabling patients' control over their own health, through informed and sustainable uptake of digital tools in healthcare; - Innovative use of health data: Developing methodologies to better handle big data in health; - Enhancing continuity of care: Supporting eHealth Digital Service Infrastructure uptake; - Overcoming implementation challenges: Developing guidelines for interoperability, data protection and systems security in healthcare; - Integration in national policies & sustainability: Preparing post-2021 cross-border policy cooperation and integration of its results in national policies.		SANTE		
12.	ADVANTAGE – “A comprehensive approach to promote a disability-free Advanced age in Europe: the ADVANTAGE initiative”	Joint Action to develop models of care for frail populations. It will provide a common approach to models of care to face the challenge of frailty of older people within a common European framework. It will promote the needed sustainable changes in the organisation and their implementation in the Health and Social System. Collects evidence on concept of		SANTE	2014-2020	

		frailty, at individual and population levels and develops a final Frailty Prevention Approach.				
13.	EUnetHTA (European Network for Health Technology Assessment)	EUnetHTA develops several services that help inform decision-making process around the introduction of pharmaceuticals and other technologies at the national, regional and European levels. These include Joint Scientific Consultations, Parallel Consultations and Post Launch Evidence Generation (PLEG). Moreover, EunetHTA has developed tools to complement all steps in the collaborative joint work process, helping partners to proceed with a defined methodology.		SANTE		
14.	Health Equity 2020	Knowledge-sharing on how to reduce health inequalities. Action database that identifies effective ways of using European Structural and Investment Fund to reduce health inequalities through an extensive literature review.		SANTE		
15.	ESI Fund for health	The project has gathered knowledge on how European Structural and Investment Funds (ESIF) are used to support health investments and build regional and country capacity to use ESIF for health investment under the 2014-2020 programming period. Plus, it aims to further develop capacities of EU countries and regions to support the effective implementation of the ESIF for health.			2014-2020	
16.	Europe's Beating Cancer Plan	The Cancer Plan is structured around the following four key action areas: promotion of healthy lifestyles, achieving a tobacco-free Europe, reducing overall alcohol use, reducing air pollution, and reducing exposure to hazardous substances. In addition to these five initiatives, the prevention pillar also comprises the 'HealthyLifestyle4All' campaign that seeks to promote healthy diets and physical activity.	€4 billion of funding, including €1.25 billion from the future EU4Health programme.	SANTE	2021-2025	Launched in 2021
17.	Farm to Fork Strategy	The Farm to Fork Strategy aims to accelerate our transition to a sustainable food system that, among others, should ensure food security, nutrition and public health, making sure that everyone has access to sufficient, safe, nutritious, sustainable food.		SANTE	2020-ongoing	

18.	SAMIRA (Strategic Agenda for Medical Ionising Radiation Applications)	SAMIRA action plan aims to ensure high quality and safety standards in the use of medical applications of ionizing radiation, some of these applications being used to diagnose and treat NCDs, such as CVD and chronic respiratory diseases.		ENER	2021-2025	Launched in Feb. 2021
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6.2. Directives

N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	Directive 89/391/EEC, Occupational Safety and Health (OSH) "Framework Directive"	The Directive lays down the main principles to encourage improvements in the safety and health of workers at work. It guarantees minimum safety and health requirements.		OSHA		
2.	European Directives on public procurement (2014/23/EU, 2014/24/EU, 2014/25/ EU), in line with the Europe 2020 strategy for the realisation of smart, sustainable and inclusive growth, associated with a more efficient use of public funding	The package of three Public Procurement Directives sets out the EU legal framework for procurement by public procurement and utilities to promote green public procurement. With the Directive, it is mandatory to consider minimum environmental criteria when purchasing products and services; to respect of the hygiene regulations of Regulation (EC) No. 178/2002; respect of Regulation (EU) No. 1169/2011 on food labelling.				
3.	Council Directive 2013/59/Euratom of 5 December 2013	Directive lays down basic safety standards for protection against the dangers arising from exposure to ionising radiation.		ENER		

6.3. Information network

N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1	Non-communicable diseases risk reduction in adolescence and youth (Global Alliance for Chronic Diseases - GACD) (Horizon Europe Work Programme 2021-2022; topic	Results from ongoing research will contribute to improved insights and evidence on the NCDs related to behaviours and conditions in youth and adolescence. Guidelines on how to support adolescents and young people to decrease future risks of developing NCDs.	The total indicative budget for the topic is EUR 25.00 million.	RTD/HaD EA	2021-2022	

	HORIZON-HLTH-2022-DISEASE-07-03)					
2	Trustworthy AI tools to predict the risk of chronic non-communicable diseases and/or their progression (Horizon Europe Work Programme 2021-2022; topic HORIZON-HLTH-2022-STAYHLTH-01-04-two-stage)	Improved health care measure superior to the standard of care. Public are better informed as to how to manage their own health. Possible to identify and follow-up individuals with high risk for chronic non-communicable diseases.	The total indicative budget for the topic is EUR 60.00 million			
3.	European Reference Network	Virtual network to share expertise on the management of complex and rare conditions European reference network consists of 24 virtual networks which connect health care providers across the EU Through the sharing of resources and the possibility of convening advisory panels to review diagnosis and treatment plans, the ERNs support more than 30 million Europeans suffering from a wide range of complex and rare conditions.			2017-ongoing	
4.	Health Promotion and Disease Prevention Knowledge Gateway	Information resource on health and non-communicable diseases for public health policymakers.		SANTE		
5..	EU Reformulation Monitoring (EURMORE)	Monitoring system of reformulation initiatives and evaluation of its feasibility in terms of efficiency and cost-effectiveness.		JRC		
6.	Public Health Best Practice Portal	The Best Practice Portal is designed to help to find reliable and practical information on implemented practices recognised as the best in the area of health promotion, disease prevention, and the management of non-communicable diseases. It also provides an overview of practices collected and transmitted in actions co-funded under the Health Programmes.		SANTE		Ongoing
7..	Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases (SGPP)	Collect and disseminate best practices related to health promotion, disease prevention, and the management of non-communicable diseases. Using EU financial instruments, it helps interested EU countries to implement best practices they are interested in.	-	SANTE		Ongoing

8.	EU Health Policy Platform	Online interactive tool to discuss any public health concerns, share best practices and knowledge. Available to Members States and stakeholders.		SANTE		Ongoing
9.	Online Resource Centre for Integrated Care	Online resource to share available knowledge and tools relevant to integrated care. This includes good practices; case studies; information on relevant contracting and payment models; as well as tools and guidance for designing, implementing and assessing integrated care models.		SANTE		
10..	European Core Health Indicators (ECHI)	European Core Health Indicators provide comparable cross-country health information. There are 88 indicators grouped by policy area available on ECHI data tool for all EU countries.		SANTE		Ongoing
11.	State of Health in the EU	State of Health in the EU provides cross-country and country-specific assessments of health system performance and population health. There is a cycle of publications: e.g., Health at a Glance, Country Health Profiles and Companion Report.		SANTE		Ongoing
12.	SHARE – Survey of Health, Ageing, and Retirement in Europe	Survey studying the effects of health, social, economic and environmental policies over the life-course of European citizens and beyond.				
13.	Steering Group on Quality and Safety of medical applications of ionizing radiation (SGQS)	This steering group provides strategic guidance and prioritisation of activities in the area of quality and safety of medical applications of ionizing radiation. It draws conclusions from relevant activities and projects and advises the European Commission on concrete actions to improve the uptake of best practices, recommendations and guidelines, as well as research and innovation results by EU countries. It supports the implementation of these actions in EU countries.		ENER		Ongoing

6.4. Funding

N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
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1.	The European Regional Development Fund (ERDF)	ERDF invests in health, a key asset for regional development and competitiveness, in order to reduce economic and social disparities. The Fund can provide grants to improve health systems resilience, accessibility and effectiveness, for instance: development of health infrastructure (including digital), innovation and efficiency enhancing reforms in health, integrated care, digital tools and solutions such as telemedicine, medical products and supplies to strengthen the resilience of health systems.		REGIO	2021-2027	
2.	European Social Fund Plus (ESF+)	Fund with the aim of promoting better integration between healthcare and social care in the main areas: access to health care for people in vulnerable socio-economic situations, primary care, and disease prevention, transition from institutional care to community and home care services, and training and up-skilling of health workforce.		EMPL		
3.	The Recovery and Resilience Facility (RRF)	The RRF is an investment facility and aims to mitigate the economic and social impact of the COVID-19 pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions, including strengthening the resilience of health systems. The measures included in the national recovery and resilience plans that have been adopted so far, contribute to a variety of health objectives, such as the improvement of primary healthcare, the transition from hospital care to outpatient care, the reorganisation of hospital networks, the upscaling of prevention (including treatment of cancer patients), improvements in the quality of diagnosing and treating patients, the strengthening of the healthcare workforce and the modernisation of healthcare facilities. Under the RRF, the total expenditure on health care-related measures amounts to approximately EUR 38 billion for 24 plans endorsed by the European Council so far, which corresponds to nearly 8% of the plans' total expenditure. In the recovery and resilience plans there is a clear focus on	EUR 723.8 billion (in current prices: EUR 338 billion in grants and EUR 385.8 billion in loans)	SG.RECOVER/ECFIN	2021-2026	Ongoing

		investments in digital health. Several recovery and resilience plans contain digital (e-)health measures that also contribute towards achieving the EU's target of allocating at least 20% of RRF budget to digital transition. EU countries dedicate funds for investments in health information assets, digital upskilling and the transformation of health care delivery via telemedicine.				
4.	REACT-EU (under the NextGenerationEU)	The package provides funding for regional and national health projects in Members States to increase the response capacity of their health systems (e.g., in hospitals and primary care), and to purchase critical medical products and supplies (e.g., vaccines, medicines, medical and protective equipment, medical devices) necessary to strengthen the resilience of health systems.	EUR 50.6 billion	REGIO/E MPL		
5.	European Investment Bank	The European Investment bank (EIB) cooperates with international partners to provide financing for medical research and improved healthcare, with the aim to ensure universal access to high-quality and affordable health services. For example, by financing the construction and upgrade of hospitals, or the research and production of vaccines and medical treatments for diseases. The EIB offers a wide range of financial products, as well as financial assistance through the European Investment Advisory Hub and the European PPP Expertise Centre (EPEC).	Does not have a dedicated budget per se, but has invested EUR 36 billion in healthcare projects to date			Ongoing
6.	The InvestEU programme	The InvestEU Programme is intended to mobilise public and private investment using a budgetary guarantee and resources from the EU budget. InvestEU will support financing for a range of investments in health, for example, in hospital facilities; primary care facilities; eHealth; innovative health services and care models; as well as in the research, development and manufacturing of pharmaceuticals, vaccines and medical devices.	The InvestEU Fund (guarantee) of EUR 26.2 billion is expected to mobilise more than EUR 372 billion of additional investment in various economic sectors, including in health.	ECFIN	2021-2027	Ongoing

7.	The Digital Europe Programme and Connecting Europe Facility	The digital transformation is a key element of the EU health policy. Investment in infrastructure for digital connectivity and digital skills training. Support work in, for example, technologies for artificial intelligence, supercomputing and cybersecurity; investing in building Europeans' digital skills; and in developing very high-capacity digital networks; and joining forces against cyberattacks. Investments can also support the use of digital technologies in areas of public interest, including health. The 'Digital strand' of the Connecting Europe Facility has a budget of EUR 2 billion which will finance digital connectivity infrastructure to support high-capacity digital networks and infrastructure of common European interest, e.g., in ensuring that socio-economic drivers such as schools and hospitals have access to future-oriented broadband.	EUR 7.5 billion to shape and support the digital transformation of Europe's society and economy	CNECT		
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8.	Horizon Europe (Health Cluster)	Horizon Europe is the EU's key funding programme for research and innovation. The aims of the health cluster include improving and protecting the health and well-being of citizens of all ages by generating new knowledge, developing innovative solutions and integrating where relevant a gender perspective to prevent, diagnose, monitor, treat and cure diseases. Further aims include developing health technologies, mitigating health risks, protecting populations and promoting good health and well-being in general and at work. Finally, this cluster also aims to make public health systems more cost-effective, equitable and sustainable, prevent and tackle poverty-related diseases and support and enable patients' participation and self-management. Other research and innovation actions relevant to NCDs will also be supported from other clusters (e.g., Cluster 6) or pillars of Horizon Europe (Pillar 1 with e.g., the European Research Council and support to research infrastructures, and the European Innovation Council of Pillar 3).	EUR 8.2 billion	RTD		
9.	EU4Health Programme	The EU4Health Programme is the EU's ambitious response to COVID-19. The pandemic has a major impact on patients, medical and healthcare staff, and health systems in Europe. The new EU4Health Programme will go beyond crisis response to address healthcare systems' resilience. EU4Health will provide funding to eligible entities, health organisations and NGOs from EU countries, or non-EU countries associated to the programme.	EUR 5.3 billion		2021-2027	

6.5. Technical assistance

N°	Specific policy/action	Contribution	Financial instruments	Lead DG	Indicative timeline	State of play
1.	Technical support instrument Country support in the field of social security and social	Provides tailor-made technical support on different policy areas, including health, to EU countries to design and	EUR 864 million	REFORM	2021-2027	EU countries wishing to receive

	welfare, aimed at increasing adequacy, efficiency, and targetedness of social protection systems (various)	implement reforms. The support is demand driven and does not require co-financing from EU countries. Relevant projects carried out in the areas of health include digital health, hospital and primary care reforms, health work force, cancer screening, etc. Also includes building social inclusion pathways for particularly vulnerable sub-groups, developing early childhood intervention frameworks for children with disabilities.				support must submit request by 31 October of each year.
2.	InvestEU Advisory Hub (formerly European Investment Advisory Hub)	Advice and assistance in accessing financing and EU investment funds. The InvestEU Advisory Hub complements the InvestEU Fund by supporting the identification, preparation and development of investment projects across the European Union. Managed by the European Commission and financed by the EU budget, the InvestEU Advisory Hub connects project promoters and intermediaries with advisory partners, who work directly together to help projects reach the financing stage.		DF ECFIN		
3.	Project DECIPHER	Development of new tools for chronic disease management with an open, interoperable and cross-border mobile application. Pre-commercial procurement.		CNECT		
4.	Innovative procurement: project EURIPHI	A coordination and support action aimed to develop a new approach to cross-border procurement practices of health innovation around a value-based approach. Increased negotiation power for EU countries and value-based procurement allowing to improve the health outcome of the patient.		RTD		

Annex 7 – Overview of past and ongoing joint actions co-funded by the EU Health Programmes

Ongoing joint actions per strand	
Integrated approach	
JAHEE – Joint Action Health Equity Europe (2018-2020) Core Work Packages: – Integration in national policies and sustainability – Monitoring – Healthy living environments – Migration and health – Improving access to health and social services for those left behind – Health and Equity in All Policies - Governance	https://jahee.iss.it/
eHAction – Joint Action to support the eHealth Network (2018-2021) Core Work Packages: – Empowering people – Innovative use of health data – Enhancing continuity of care – Overcoming implementation challenges – eHealth national policies and sustainability	http://ehaction.eu/
JADECARE – Joint Action on implementation of digitally enabled integrated person-centred care (2020-2023) This Joint Action aims to reinforce the capacity of health authorities to successfully address important aspects of health system transformation, in particular the transition to digitally enabled, integrated, person-centred care. To achieve this, four original good practices support the participating regions of EU countries to transfer the practices and generate knowledge into the healthcare systems of the participating partners. The four good practices are: – Basque health strategy in ageing and chronicity: integrated care – Catalan Open Innovation Hub on ICT-supported integrated care services for chronic patients – Optimedis Population-Based Integrated Care Model – Digital Roadmap towards an integrated health care sector (Region of Southern Denmark)	https://www.jadecare.eu/
Reducing the use of tobacco or related products	
JATC - Joint Action on Tobacco Control (2017-2020) Core Work Packages: – Integration into national policies and sustainability – EU Common Entry Gate (EU-CEG) data extraction and handling – Tobacco product evaluation – E-cigarette product evaluation – Laboratory, verification, collaboration and analyses	https://jaotc.eu/

– Additives subject to enhanced reporting obligations	
JATC2 – Joint Action on Tobacco Control 2 (2021-2024) Core Work Packages: – Sustainability and cooperation across Europe – Analysis of EU-CEG data and strengthening laboratory capacity for regulatory purposes – Reinforcement to ensure compliance with tobacco regulations – Health Impact and Regulatory Implications of E-Cigarettes and Novel Tobacco Products (TCNs) – Legislation on Smoke-Free Spaces (SFE) and Advertising, Promotion and Sponsorship of Tobacco Products (TAPS) – Best practices for the development of an effective and comprehensive end-of-tobacco strategy	https://www.icoprevencio.cat/uct/en/portfolio/jatc2/
Reducing harmful alcohol consumption	
RARHA – Joint Action on Alcohol Related Harm (2014-2016) Core Work Packages: – Generating more comparable data across EU countries on consumption patterns and on alcohol related harm – Understanding the scientific basis for different guidelines for low risk drinking across Europe, to provide guidance to policymakers – Developing a toolkit to disseminate good practices on early intervention, public awareness campaigns and school-based programmes	www.rarha.eu https://rarha-good-practice.eu/
Healthy eating, physical activity, overweight and obesity	
JA Best-ReMaP – Healthy Food for a Healthy Future (2020-2023) Core Work Packages: – Sustainability and integration in national policies – EU harmonised reformulation and processed food monitoring – Best practices in reducing marketing of unhealthy food products to children and adolescents – Public procurement of food in public institutions	https://bestremap.eu/
JANPA – Joint Action on Nutrition and Physical Activity (2015-2017) Action areas: – Improve education – Facilitate physical activity – Provide healthy options – Care for overweight children – Restrict marketing – Monitor and screen – Includes a good practice database (39 good practices)	http://janpa-toolbox.eu/
Prevention and/or management of non-communicable diseases	

JA-CHRODIS – Joint Action on Chronic Diseases and Promoting Healthy Ageing across the life cycle (2014-2017) Core Work Packages: – Platform for knowledge exchange – Health promotion and disease prevention – Multimorbidity – Diabetes (national diabetes plans)	http://chrodis.eu/wp-content/uploads/2014/06/JA-CHRODIS-AT-A-GLANCE-LAST-VERSION.pdf
CHRODIS+ – Implementing good practices for chronic diseases (2017-2020) Core Work Packages: – Integration in national policies and sustainability – Health promotion – Multimorbidity care – Fostering the quality of care for people with chronic diseases – Chronic disease and employment Includes DG SANTE's Best Practice Portal (best practices selected by actions funded under the Health Programmes)	http://chrodis.eu/
ADVANTAGE JA – Joint Action on frailty (2017-2019) Core Work Packages: – Frailty at individual level – Frailty at population level – Managing frailty – Models of care – Training and research on frailty	https://www.advantageja.eu/index.php/
Mental health and neurological disorders	
European Alliance against Depression (EAAD; 2004-2005; 2006-2008) This Joint Action aimed to spread and implement the successful model developed as “Nuremberg Alliance against Depression” in countries to improve the care for people with depression and prevent suicidal behaviour. The EAAD was established in 2008 by mental health experts to sustain the network, activities and outputs of the EU-funded actions, including the iFightDepression website (www.ifightdepression.com), available in ten languages.	eaad.net
JA MH-WB – Joint Action for Mental Health and Well-being (2013-2016) Core Work Packages: – Depression, suicide prevention and eHealth – Community-based approaches to mental health – Mental health at workplaces – Mental health and schools – Mental Health in All Policies	https://mentalhealthandwellbeing.eu/the-joint-action/
JA ImpleMENTAL – Joint Action on Implementation of Best Practices in the Area of Mental Health (2021-2024) This Joint Action aims to increase the knowledge about and experiences with implementing two best practices in the area of mental health: – Belgian Mental Health Reform	https://ja-imental.eu/

– Austrian Best Practice on Suicide Prevention (SUPRA)	
ALCOVE – First Joint Action on Dementia – Alzheimer’s COoperative Valuation in Europe (2011-2013) Core Work Packages: – Epidemiological data on dementia – Timely diagnosis of dementia – Rights, autonomy and dignity of people living with dementia – Support systems for BPSD (Behavioural and Psychological Symptoms of Dementia)	Home (alcove-project.eu)
Act on Dementia – Second Joint Action on Dementia (2016-2019) This Joint Action aimed to promote collaborative actions to improve the lives of people living with dementia and their carers. Core Work Packages: – Diagnosis and post-diagnostic support – Crisis and care coordination – Residential care – Dementia-friendly communities	Welcome to Act on Dementia Act on dementia (nrscotland.gov.uk)

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